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PRESIDENT'S ADDRESS[1]

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As an executive officer of this Association I would like to discuss with you the possible needs of the Association within the next decade. Our Constitution reads, Article 1, Section 1: In conformity with its Charter, this association shall be known as THE AMERICAN DIETETIC ASSOCIATION. Article 2, Section 1: The objects of this association shall be: To bring about closer coöperation between dietitians and those in allied fields, in order that more effective work may be done in improving the conditions and raising the standards of dietary work and the training of dietitians.

The government of the Association is outlined in Article 5, Section 1, and reads as follows: The governing body of this association shall be an Executive Committee, consisting of nine (9) members who shall be selected in the manner hereinafter provided. Section 2. At each annual meeting of the members of the association they shall elect by ballot a President, a First Vice-President, a Second Vice-President, a Secretary and a Treasurer, who shall hold office until the next annual meeting of the members of the association and until their successors shall be elected and shall duly qualify. Said officers shall constitute five (5) of the nine (9) members of the Executive Committee; the remaining four (4) members of said committee shall consist of the chairman of the Administration, Education, Diet Therapy and Social Service Sections, respectively, which said chairman shall be selected in the manner provided in the by-laws of the association from time to time in force. This form of government has seemed to stand the test of time in as much as this constitution so recently adopted duplicates the old constitution regarding laws on government.

[1] Presented before the American Dietetic Association, St. Louis, October 17, 1927.

We are now an organization of approximately 1000 members. Anticipating our future by some of our experiences of the past year I would suggest that we modify our form of government somewhat as our membership increases. As our constitution reads there is a possibility of a complete change of officers each year and a necessity for a change within three years. Is it desirable to leave the decisions regarding policies of the organization and the entire direction of the work of its members to this group? If the organization of County and State Associations were completed a representative form of government might be adopted.

At the present time the Executive officers are in need of an advisory board. This need not mean that we go outside our own organization for council unless the association wishes to do so, but it will mean that those chosen to give council will be recognized as authorities for the association.

With an association of more than 1000 members it is possible that an advisory committee of only three members is to be recommended. As the association grows, and as responsibilities and a desire for political advantage increase, it may be well to increase this Advisory Board. I would suggest that members of this board be appointed by your Executive Committee, one member each year. This would make the term of office for each member three years. Later I believe a longer term would tend to stabilize the organization. Working with this board your President would have a group of advisors which would prove invaluable to her.

At the same time I would recommend that your President have a President elect working with her; sharing the work which is becoming a burden to the Executive Officer, and preparing to assume the responsibilities of the Executive Office for one year.

It would seem that the time is at hand to increase the responsibilities of the various sections. I believe it should be the ambition of the American Dietetic Association to set the standards for dietitians. Let us answer for ourselves the embarrassing question "What is a dietitian?" To do this registration, state or national, may be necessary. The amount of work involved in this is appalling and can only be accomplished by organized effort, extending over a long period of time. Is the Section on Education ready to consider this work?

Encouraging and flattering requests are coming from many sources for information which the American Dietetic Association should be in a position to supply. These requests we would gladly turn over to our sections. But are these sections at present organized on a basis to take care of the interests of dietitians as a whole?

It is possible that a reorganization of the Sections is to be recom-

mended, as the functionsof the dietitian are developed an ever-broadening field of interests is opened. These interests can best be guarded by sections of the association, divided according to function as for example; Section on Education; Section on Administration; Section on Nutrition: —but the field and its possibilities are too great to be covered here in a single paragraph. Sections should be entitled to elect their own officers, and to elaborate the section organization as necessary to take care of the interests of all dietitians. Membership requirements could be based on National membership requirements plus any additional work requirement imposed by the section, thus stimulating interest in the section and making active section membership a reward for professional attainment. As our by-laws now read the head of each section is appointed by the President and automatically becomes a member of her cabinet or executive committee. This has its advantages and does not prevent unlimited possibilities for organization and development within the sections, but up to the present time our sections have functioned only as committees, appointed by the President from year to year.

The JOURNAL OF THE AMERICAN DIETETIC ASSOCIATION now is a reality, and like the Association itself it seems to me to have outgrown our present plan for its administration and our constitution makes no provision for its existence. As a working basis I would like to suggest the following plan. Your editor needs a critical board which we will call the Journal Board. The JOURNAL has been published for three years; it has met with more or less success in its present form but policies for a journal which is the official organ of an association cannot be fixed in three years.

To stabilize this organ of the association I would suggest that your President, with the approval of the Executive Committee, appoint a Journal Board made up of six members, appointing one member each year, this would make the term of office for each member six years; the President of the association to be chairman of this board; the editor of the JOURNAL to be elected by the board and to act as its executive officer. For the present it would seem an imposition to ask an unpaid editor to assume the duties and responsibility of that office for a longer period than three years, at the same time it would seem unlikely that a thoughtful and conscientious member would be willing to direct this work for a shorter period.

These suggestions regarding the organization of the work from the point of view of an executive officer are given not with the hope that they will be accepted by the association as they stand, but with the sincere desire that they may stimulate constructive criticism and ultimately lead to a more representative form of government.

METABOLISM OF CARBOHYDRATE IN RELATION TO KETOSIS[1]

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When asked to take part in this program I was tempted to discuss some general phase of nutrition such as the history of its scientific development, or perhaps the rôles of fads and fashion as compared with science in spreading diet propaganda. But with some restraint I have decided to stick to my last and shall leave all somewhat philosophic matters in more competent hands. I have chosen instead a more technical and theoretical subject in which I have long had a personal interest,—and one in the development of which dietitians have had an important part. Much of the information has come from the study of hospital patients and normal subjects on accurately measured diets of extreme types, which are apt to be thoroughly tiresome and unpalatable unless skillfully arranged and prepared. I have eaten experimental diets put together by chemists and doctors and usually they are horrible. My topic has to do with some particular functions of one of the common foodstuffs, carbohydrate, and the consequence of its deprivation.

The fact that carnivorous animals and the Eskimos normally nourish themselves almost wholly without carbohydrate would seem to suggest that this one of the three foodstuffs is not indispensible. Yet all other animals and all other races of mankind use it to supply the greater part of their fuel needs. As you know starch and sugars make up 50 to 70 per cent of the total caloric value of ordinary diets in this and European countries. In the Orient the proportion is still greater. According to Pearl's statistics carbohydrates make up 52 per cent of the caloric value of the net human food consumption in our country as a whole (1911–1918), while fat furnishes 34.5 per cent and protein 13.5 per cent.

It is not surprising, in view of the prominence of carbohydrate as our main fuel, that its metabolism should be actively investigated. No subject in nutrition is now more widely worked upon, so far with encouraging but meager results. Glucose has a small molecule and is

[1] Address before the American Dietetic Association, St. Louis, October 18, 1927.

a fairly simple substance, but we have yet no clear idea what happens to it when living cells convert it into carbonic acid and water. Claude Bernard showed that when starch or sugar is eaten it passes to the liver as glucose, to be there temporarily stored as glycogen, and gradually distributed throughout the body again as glucose. Minkowski proved that removal of the pancreas in animals leads to the prompt excretion as glucose of the absorbed carbohydrate as well as of an excess which is formed from protein. The animal had therefore lost the power to retain and to oxidize glucose whatever its source. Banting and Best demonstrated a temporary recovery of this lost power if an extract of pancreas were injected. Thus we know the products, where the sugar goes, and that the pancreas participates in its combustion. How insulin acts, and through what steps sugar is oxidized remain mysteries. That information is greatly needed to explain its exceptional behavior. In normal subjects under ordinary conditions sugar is somewhat preferred as fuel for the cells over fat and protein. If an abundance of sugar or glycogen is available the cells use that chiefly, and less of fat and the split products of protein. Only when the glycogen stores become low do the cells fall back upon fat and cell protein for fuel. This preferential combustion of carbohydrate, although not complete, is seen also in lower animals and even in micro-organisms. It sems to be easier and therefore quicker to oxidize than fat or protein. This property is usually called the "protein- or fat-sparing action" of carbohydrate. It is doubtless to this action that high carbohydrate diets owe their effect in retarding the emaciation, the consumption of body fat and protein in protracted fever, a principle advocated some years ago by Coleman and myself and now generally used in typhoid. Our success in that investigation was made possible by the dietetic ingenuity and care of Miss Edna Cutler. I recall that when that work was first reported at a medical meeting, a very distinguished clinician in discussing my paper hooted the idea of "counting calories" in feeding patients. He never had found that necessary and did not know how. That was nearly twenty years ago, and time has changed the attitude of physicians toward diet. We now realize that a bountiful carbohydrate supply and abundant glycogen reserve is the best preparation for any emergency, as beneficial in acute fevers or in prolonged anesthesia as for a short fast or a Marathon race or mountain climbing. Glycogen somehow protects the liver from fatty infiltration and from the toxic effects of chloroform (Graham, Opie). According to current physiological doctrine carbohydrate alone is utilized in muscular contraction. If that be so it is one of the real essen-

tials; for the heart must beat, and respiration must go on. But I feel sure that time will show the error of this doctrine. Man can work hard on high-fat low-carbohydrate diets and the combustion of fat certainly under such conditions furnishes much of the energy, though we certainly do work better on carbohydrate.

There is another property of food carbohydrate which I wish especially to speak about, its function in preventing acetone body acidosis, or as we now say, "ketosis." As of course all of you know, had you gone without your dinner tonight and were to miss your meals tomorrow, by the second morning you would begin to exhale acetone in your breath and excrete acetone, acetoacetic and hydroxy butyric acids in your urine. If however you have a bag or pocket full of sugar or candy and nibble that during the evening and throughout tomorrow, say two or three ounces a day, you could miss all these meals with hardly a trace of ketosis. If again you fasted (without the sugar) for two or three days, thus developing a ketosis, and then took the sugar it would have little effect for many hours. After six to twelve hours the ketosis would decrease and disappear. But if you were given some insulin about the same time as the sugar, your ketosis would disappear much more quickly,—in two or three hours let us say.

This strange behavior suggests a number of questions which are of great interest in medicine, physiology, biochemistry, and also in dietetics. For these same acetone bodies, which any of us would excrete under the conditions which I have stated, are the substances responsible for the acid poisoning and death in coma formerly so characteristic of diabetes. The amounts of these acids which are sometimes formed are astonishing. Long before the days of insulin I once studied a patient who excreted 120 grams in twenty-four hours. This is equivalent to over a liter of normal acid, or 10 liters of tenth-normal, which had to be neutralized in the tissues. It is no wonder the body base becomes depleted, that respiration is labored and that ketosis is dreaded in diabetes. Yet this marked ketosis even in cases of diabetic coma often quickly disappears after administration of insulin. Non-diabetic subjects never form such quantities, but one third to one-quarter this amount has been found with normal men, and relatively large amounts in vomiting of pregnancy, post anesthetic acidosis and other conditions. In virtually all such conditions the ketosis is abolished by glucose, and more quickly by glucose plus insulin.

If it were not for ketosis the disease diabetes would be far less serious than it is. Possibly it might amount to little more than a dietary incon-

venience, so long as nutrition could be maintained with fat instead of carbohydrate; though as I have already suggested there are various special needs for carbohydrate.

Some of the questions which probably arise in your mind when you develop this ketosis on fasting or when you see a diabetic patient unconscious and gasping under its influence, are: What food or body materials give rise to the acetone bodies? Why are they formed in fasting or by the diabetic, if not normally? What factors determine how much is formed? If a little candy will prevent ketosis, how does the sugar accomplish it? How does sugar abolish ketosis in non-diabetic ketosis? In diabetic ketosis sugar has no such effect. Why the difference? How does insulin abolish diabetic ketosis?

Some of these questions you can answer as well as I; some I can guess at; and some neither of us nor any other can yet explain. But enough progress has been made that we can now predict with some assurance approximately under what conditions ketosis will appear in any human subject; or what is more to the point we can state, roughly to be sure, but in quantitative terms, *what sort of mixture of foodstuffs must be metabolized to avoid ketosis*. We have a start toward a rational basis of calculating diets designed either to produce ketosis or to avoid it. Plenty of mystery yet remains to stimulate interest in further work on the subject, indeed the haze is still very thick; but some of the mystery has been dispelled and we seem to be headed in the right direction.

Every time that those of you who work in hospitals calculate an optimum diet for a diabetic, aiming as you do to shoot between two extremes, the subject's carbohydrate tolerance and the border-line of ketosis, your calculations are based on some of this new information. And the same is true of the ketosis-producing-diets now being used with much promise in treating epilepsy.

It may therefore interest you to review very briefly some of the steps which have led up to these calculations. Time permits only the most hasty sketch, and under the circumstances I may seem more dogmatic than would be proper in a more critical discussion. I therefore enter here a general qualifying statement to the effect that some of the views expressed are probably only partly or very approximately true—and true only in the pragmatic sense. The whole subject of ketosis floats plunk in the middle of such seething whirlpools of scientific activity as intermediary and carbohydrate metabolism and cellular oxidation; the eddies are so numerous and strong that one cannot tell in what direction the subject may be drawn.

First let us trace the early history of the acetone bodies. Like so much of our knowledge of intermediary metabolism that concerning the acetone bodies came from human diabetes; without that disease biochemistry would be a much poorer science than it is. In 1827 Petters became interested in the characteristic odor of the breath and urine of diabetics and Lerch a chemist suggested that it smelled like acetone and aided in its probable identification. Petters noted the same odor also in the breath of patients with scarlet fever and typhoid and concluded that it was formed from carbohydrate fermentation in the diseased stomach. In 1865 Gerhardt discovered that many diabetic urines gave a reddish color with ferric chloride, like the behavior of acetoacetic ester, which had then been prepared by organic chemists. Gerhard concluded that the substance present, in urine giving his reaction, was this acetoacetic ester. This conclusion went unchallenged for fifteen years until von Jaksch and Diechmuller (1880) and the chemist Tollens (1881) showed the substance to be not the ester but the free acid, which was then unknown. A few years later the third of our "acetone bodies" was discovered. The way this one was brought to light illustrates how an important discovery is often simultaneously approached from different directions. The French agricultural chemist Boussingault had 30 years before found much ammonia in diabetic urines and Hallervorden (1880) suggested that since the urines were acid the ammonia must indicate high excretion of organic acid. Stadelmann in 1883 was impressed with the idea of acid intoxication in diabetic coma, searched for this acid and isolated crotonic acid. Almost at once Minkowski showed that Stadelmann's acid was a decomposition product of the real one and isolated and identified hydroxybutyric acid. Quite independently at the same time Kulz was observing the optical rotation of diabetic urines in a polarimeter, and found a levo rotation after fermenting away the dextro rotating glucose. Search for the levo rotating substance yielded oxybutyric acid, identified by analysis of its silver salt.

Ever since that time these three so-called "acetone bodies" have played an important rôle in clinical chemistry and in metabolism and now they create problems for the dietitian. At first the acetone bodies were believed to be formed from carbohydrate, somewhat later from protein, especially body protein. But in 1895 it was shown especially by Hirschfeld that ketosis (as we now speak of their formation and excretion) might exist without loss of body protein, that whatever the origin, they appear only in carbohydrate starvation, and that the metabolism of carbohydrate somehow prevents ketosis. Then followed the demonstra-

tions about 1900 by Schwarz, Geelmuyden, Magnus Levy and others that the chief mother substance was fat and fatty acid. And experiments by Knoop (1904) confirmed and elaborated by Dakin (1908–1910) established the pathway of "beta carbon oxidation" thus providing a probable scheme for the formation of the beta keto and hydroxy acids from the long fatty acid chain. About the same time Embden, Baer and Blum and Dakin working with individual fatty acids and amino acids showed that some gave rise to acetone, and others not. Growing out of many such investigations it gradually came to be realized that different food-stuffs could be classified in two groups, those which in the course of metabolism appear to form acetone and related acids (all three acetone bodies always occur together, never singly), and those which do not. Fatty acids are the most important members of the first the "ketogenic" class, and carbohydrate of the second. Carbohydrate not only does not form acetone (in animal metabolism) but *prevents* ketosis, and is therefore termed "antiketogenic." The glycerol of fat and the sugar formed in the metabolism of protein fall in the antiketogenic group, while a few of the amino acids are known to be convertible into acetone.

This idea of a sharp distinction between the ketogenic and antiketogenic groups is a fundamental one. If it is in principle incorrect the whole fabric of ketosis and ketogenic balance will topple. And a number of people believe that it *is* incorrect. One of the main points involved has to do with the conversion of fat into carbohydrate. Obviously, if in the course of metabolism the fatty acid of fat, a ketogenic material, be converted into antiketogenic glucose, we could not tell how much of either is being metabolized as such. Respiratory quotients, D:N ratios and ketogenic ratios alike would be meaningless. There is no good chemical reason why fat might not be converted into sugar, since we know very well that the reverse transformation of glucose to fat often occurs. This is at present a highly controversial question, of such a character that nearly everybody concerned must take sides. I will not discuss it, for it would lead us far afield, but will merely express my own judgment to the effect that although quite possible, the evidence on all sides is overwhelmingly opposed to a formation in animal metabolism of sugar from fat (other than the glycerol). The contrary opinion, expressed for example by Dr. Joslin in a recent number of the journal of your association, seems to me based on misinformation. But the facts will ultimately decide. In the meanwhile we may logically take a strict pragmatic view and see what we can do with the idea that the metabolites fall into two distinct and opposing groups, the ketogenic and the antiketogenic. Does the idea lead anywhere?

I have already said that ketosis appears only when the amount of carbohydrate being metabolized is low. In what way does carbohydrate exert this action? One possibility would of course be that the carbohydrate is merely metabolized by preference and an equivalent amount of fat spared; but this is disproved by the small amounts of carbohydrate which are effective. It takes far less carbohydrate to prevent ketosis than to spare fat from combustion. I have stated the more probable view on a former occasion as follows:

> It appears that the fragments of food material metabolized in the body may be divided into two distinct classes which have opposing influences upon the appearance of acetoacetic acid and ketosis. The ketogenic group, the fatty acids and several of the amino-acids, pass through the stage of acetoacetic acid. Here their oxidation stops unless a sufficient amount of the other group of antiketogenic carbohydrate and glucose-forming substances is simultaneously being oxidized. The *oxidation* of glucose is evidently essential, because the severe diabetic, forming glucose from protein, but failing to burn it, is the best manufacturer of keto acid.
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> These facts point . . . clearly to a chemical reaction between some oxidation product of glucose and one of the acetone bodies or its precursor, as the explanation of the inhibiting effect of carbohydrate upon ketosis.

Some such chemical reactions have long been hypotheticated (by Naunyn, Geelmuyden, Woodyatt, and Ringer) but until about ten years ago no one thought of trying to test this idea with different subjects during ketosis. As you know a characteristic of chemical reactions between different substances is that definite and constant amounts of each are always involved. A chemical reaction calls for constant proportions, and if carbohydrate acts in the way suggested we would expect to find some constancy in the conditions under which ketosis appears in many or all different subjects, normal and diabetic alike. The quantity of antiketogenic metabolites compared to the quantity of ketogenic metabolites should be the same. The trouble of course comes in measuring these quantities in molecular terms. It is obviously impossible to learn the composition of the metabolic mixture, except by very indirect methods.

The first attempts to analyze ketosis in this way were limited to the composition of the food eaten. In 1914 Zeller found that acetone first appeared when the diet contained 4 grams of fat to 1 of carbohydrate, which result Lusk interpreted to mean that 2 molecules of hydroxybutyric acid require one of glucose for combustion, that is a molecular ketogenic ratio of 2:1. From the same point of view Ladd and Palmer

found ketosis in diabetics with food mixtures corresponding to molecular ratios of fatty acid to glucose between 2:1 and 1:1.

At this point (1920) I undertook a more detailed analysis of all available data, basing the analysis on materials metabolized rather than fed, and including an estimate of the ketogenic effects of amino acids as well as of fatty acid, and the amounts of glucose derivable from protein and glycerol. A large number of cases of very diverse character, normals fasting and on low CH diets and diabetics showed with surprising regularity that ketosis does not exist when the metabolic ratio is definitely less than 1:1; that ketosis appears at ratios between 1:1 and 2:1 and is more severe the higher the ratio. There were of course occasional exceptions, but the reliability of the data in such cases is often open to question. Similar analyses have since been made by many others with, in general, the same result (Woodyatt, Hubbard, Wilder, Boothby, McCann, Richardson).

Perhaps the simplest and most reliable method of estimating the composition of the mixture being metabolized is to determine the respiratory quotient. An R.Q. of .80 corresponds to a molecular ketogenic ratio of 0.5:1; an R.Q. of 0.76 to 1:1; and of 0.73 to 2:1. Again it is found as a rule that ketosis does not exist with R.Q. greater than about 0.76, and usually does exist when the R.Q. is 0.74 or lower. This is especially well shown by the data of Richardson and Ladd and of Joslin. There are to be sure exceptions to the rule, as there are with every biological phenomenon, but the evidence certainly supports the conclusion that both normal and "diabetic patients, fasting or otherwise, pass the threshold of ketosis in either direction in accordance with the proportions of the foodstuffs which they oxidize" (Richardson and Ladd). From analysis of his own extensive data Joslin states that a "definite relation between acidosis (ketosis) and R.Q. is demonstrated." (Some of the earliest observations on R.Q. in my laboratory were made by one of your past presidents, Mrs. Bryan.)

There well may be certain conditions in which various factors tend to accentuate the appearance of ketosis. Very fat subjects, children and pregnant women often appear to develop ketosis much earlier in fasting than most other persons. But there is good reason to suspect that their glycogen reserves are also less, and exhausted quicker. It is astonishing how quickly a fasting ketosis appears in children who are subject to attacks of recurrent vomiting; and the observations of Ross and Josephs indicate that this quick ketosis is the result of rapid exhaustion of carbohydrate. They find a parallel marked hypoglycemia, which fails to rise after adrenalin injection, thus proving glycogen exhaustion.

With subjects in which a *severe* ketosis exists the analyses of the ketogenic balance commonly show a remarkable agreement between the amount of total acetone excreted and the calculated excess of ketogenic materials over the total glucose. I have analyzed many data of this sort, and have felt almost ashamed to publish the results—the agreement is so suspiciously good. In this condition of marked ketosis the calculations indicate that each molecule of glucose burned in some way accomplishes the combustion of about 2 molecules of acetoacetic acid, the balance appearing in the urine (as mixtures of the three acetone bodies). Whatever the manner of action of the glucose, I think the evidence clearly points to the conclusion that all human subjects develop ketosis when the mixture of metabolites being oxidized comes within a certain range; that this range concerns the ratio of total molecules of ketogenic to total glucose molecules and that this molecular ratio for the threshold of ketosis lies between 1:1 and 2:1.

This principle has played an important part in explaining the behavior of ketosis in diabetes as influenced by methods of treatment. From the ketogenic balance principle we can predict that the *only* way to reduce a ketosis in a diabetic subject should be either to reduce the total metabolism and therefore the ketogenic factors by bed rest, fasting or undernutrition—or to increase the carbohydrate tolerance, that is the antiketogenic factor, by giving insulin. Just as all of us can avoid bankruptcy in these days only by decreasing our expenditure or by increasing income. The accounts must balance. As you know this is in accord with clinical experience in diabetes. In pre-insulin days fasting and undernutrition decreased energy expenditure. Now the lowered income of the diabetic is increased by the action of insulin. The idea of ketogenic balance was developed before the days of insulin, and has greatly rationalized diabetic dietaries. And, conversely, experience in the action of insulin has done much to establish the fundamental correctness of the ketogenic balance idea.

The very extensive experience now being accumulated with low carbohydrate-high fat diets in treating epileptic children brings additional information. The diets designed by calculation to produce ketosis, do so. A recent paper by Talbot and associates which states that distinct ketosis regularly appears when the total calories of metabolism is supplied in the ratio,

$$\text{grams Fat} = 3 \times (\text{grams Protein} + \text{Carbohydrate})$$

which corresponds to a molecular ketogenic ratio of about 2:1. These facts seem to me to mean that the mechanism of the antiketogenic action of glucose must be through some sort of coupled chemical reaction between the *oxidation* of sugar and the final combustion of one of the acetone bodies. Different human subjects undoubtedly behave *somewhat* differently, but the differences are not great, and are not due to "constitution" or race or color of the skin, but to the metabolic state, that is to the mixture metabolized at the time. The rates and proportions of simple chemical reactions also vary with relative concentrations, and especially so in heterogeneous systems far simpler than the animal body. We need not be surprised that our calculated expectations do not always agree with the exact degree of ketosis; the surprising thing is that they agree as well as they do. Some of us have been looking for an altogether unreasonable agreement, considering the complexity of the subject.

In reference to the question of individual, racial and species differences in behavior toward ketosis, several very recent observations are of considerable interest. Eskimos have often been cited as probable exceptions to the principles we are speaking of. They habitually eat little or no carbohydrate, yet presumably have normally no ketosis. An analysis of their average dietary indicated to me some years ago that the sugar derivable from their high protein consumption should supply enough antiketogenic material to avoid ketosis. Now that expectation has been confirmed. Dr. Peter Heinbecker this last summer has studied eskimos on their usual diets and during fasting. With his consent, I am able to announce the interesting facts that normally they are free from ketosis, but develop ketosis on the second day of fasting, exactly as do people of the temperate zone. And the fasting ketosis is of course similarly abolished by glucose. So the eskimos have no such special adaptation against ketosis as has been attributed to them. Going to another but related species, one of my colleagues, Dr. Friedemann, has recently shown that 5 different monkeys and apes developed a fasting ketosis closely corresponding in degree to that expected if they were supposed to behave like man. And here also the ketosis was abolished by carbohydrate food. Other animals appear to behave differently. The dog and rat seem rather resistent to development of ketosis, though it does occur and recent work by Wierzuchowski indicates that the ketosis of dogs made diabetic by phlorizin is approximately accounted for by the principles we are talking about.

There is much more that might be said, but my time is more than up.

I have not even mentioned the work on sugar oxidation in vitro and its "ketolytic" action on acetoacetic acid, which has occupied my attention for some years and which is strikingly analogous to the antiketogenic action of glucose in metabolism. This work has been an important encouragement in the study of the metabolism of ketosis and has contributed new points of view. But it is much too technical for a discussion of this sort. I may say however that it is leading us to a conception of the character of the in vitro reaction which is quite different from that first proposed. It now appears to be not a combination between the sugar and acetoacetic acid, though that does occur, but a combination of sugar and oxygen (or hydrogen peroxide) to give a strong peroxide-like substance which in turn oxidizes the acetoacetic acid. There is some evidence that this may occur in the body as well, but its satisfactory demonstration must await much further investigation. If it proves to be so, real meaning will be given to the old phrase that "fats burn in the fire of carbohydrate."

In the meanwhile however, I feel that the quantitative hypothesis of a ketogenic : antiketogenic balance and its several applications to problems of human metabolism, if not confirmed, are at any rate amply justified by experience. It has brought some light into what before was darkness, confusion and empiricism.

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THE PSYCHOLOGY OF PERSONNEL MANAGEMENT[1]

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Some years ago a boy secured a position in the office of a lumber firm. After a few month's service he was discharged and his father received the information of his boy's disgrace in the following words: Your boy "is the most miserable failure that I have ever seen. He will never amount to anything."

The disgrace was a heavy blow to both father and son. It had been the intention that the boy should follow a business career and now their hopes were shattered. Only one possibility was open. If the boy was too stupid to become a successful business man why not make him into a university professor. To be sure this was a terrible drop in the ambition of father and son but facts could not be ignored. Stupidity must be reckoned with and a line of work suited to mental deficiency must be found. So the youth was sent to the university to fit himself to teach those equally handicapped mentally.

In some way, probably by chance, the boy got into thescience department where he attracted the attention of his instructors and was given opportunity to experiment in the research department. To close this little story of personnel management and lack of management, at twenty-three years of age this boy had discovered a coal-tar compound which made him one of the famous chemists of the world. His name was Emil Fischer.

Objection may be made to the application of this incident by saying that discovery of geniuses, chemical or otherwise, is not the function of organizations established for quite other purposes. It seems clear, however, that any organization, for whatever purpose it may be founded, should have a clearly worked out plan for discovering the native ability of its subordinates, since only in this way can coöperative groups succeed in their main purposes.

Personnel management is not merely a matter of ability. It is also a state of mind. Not every person of good ability can manage others. It was not a matter of chance that Thomas Mott Osborne's ideas of prison reform passed into a state of coma when he died. "Things do not happen

[1] Presented before the American Dietetic Association, October 18, 1927.

here as they should," exclaimed one of Mr. Osborne's subordinates, speaking of the behavior of convicts. "These prisoners should all break loose and run amuck, but they do not do it. Why don't they? I can't understand it. It is contrary to human nature for men who have the freedom which these prisoners have not to abuse it, yet they do not." It was not mere chance, again, that enabled Fremont Older, of the San Francisco Bulletin, to have as manager of his ranch a man who had served thirty-five years in state prisons. This state prison convict was absolutely honest with Mr. Older but he would have stolen the bridles from the ranch horses under many another master.

It may seem a far cry from state prison convicts to personnel management, but if convicts can be made to want to behave in a social instead of antisocial way, it is the best type of personnel management.

The roads of Colorado were built over mountains and through rocky gorges by state prison convicts. During an entire winter the only man in the prison camp who carried a gun was a life termer who carried one to keep those outside of the penitentiary from stealing the provisions of those inside. The warden of the Colorado penitentiary not long ago said that he would not be able to get along without the coöperation of the convicts.

We have said that personnel management is as much a state of mind as it is a matter of ability. If one believes in controlling, directing and eternally supervising, one will never make a good manager of men or women. Successful management requires the stimulation of subordinates to the point of enthusiasm. Men and women are interested in achievements provided they have some share in the direction of what is being done. We have heard a good deal about the instinct of workmanship. Whether this spirit of workmanship is an instinct or not is immaterial. Men and women of ability want to accomplish things and they want to feel that the achievements are their own. If you have anyone in your organization who does not have this desire, that person should be gotten rid of before he has been with you long enough to establish a claim on perpetuity. But, on the other hand, you yourself may be to blame. It is up to the manager of an organization to be sure that the right sort of mental stimulation prevails.

It is easy enough to hire and fire. That requires no intelligence. There are business and educational organizations that do not keep their men long enough for them to become part of the organization. The moment one of these subordinates becomes sufficiently capable to be of value elsewhere he is allowed to go because his retention would mean an increase in salary.

Many business and social organizations as well as colleges and universities are run on this bargain counter plan. They get cheap help, keep them until they are worth something and then allow them to go, rather than pay the salary that competitors are offering. It was not long ago that a business man asked an acquaintance to recommend a man for a $10,000 position. The reply to this request was, "Mr. Smith whom you allowed to leave your employ last year rather then pay him the salary that he wanted is now drawing exactly $10,000 with us and he is worth every cent of it."

Hiring and firing is expensive both in the actual outlay of money and also in the inefficiency which always prevails where changes in personnel are frequent. No organization can advance unless it retains a certain continuity. Some kinds of mechanical work can, of course, be picked up rapidly by new employees, but the mechanical features of an organization do not represent its lines of growth. Progress requires prevision. There must be a forward glance, but those who plan for the future must not be unmindful of what has gone before as well as of what other similar organizations are doing. In other words development and advancement in any type of work requires a knowledge of the past history of the organization joined with some insight into the future. I need not tell you that this is a revolutionary period and, since it is a time of big things, a manager is primarily an executive. Changes are occurring so fast in all lines of human activity that it is difficult for anyone to keep up with them.

For this reason there should be someone in an organization whose business is personnel work. The time has passed when men and women can be dealt with successfully in a mass. Efficiency requires contentment of the workers, and this attitude of mind is impossible unless they know that someone is interested in them.

Not long ago the president of a large manufacturing plant said that at that time he had some score of vacant chieftainships which he was unable to fill from the thousand men in his employ. A manager who has worked with a thousand men for a year and then must look outside of his organization for men to fill positions of responsibility has been a failure. One group of a thousand men is much like another group. Some are efficient and some are inefficient. Some want to accomplish things and others are satisfied with their Saturday night's wage. But efficiency in any organization requires a sifting of its men. Those who are incapable of other than routine work should be relegated to mechanical jobs or gotten rid of before their claim to retention has been established. This sifting process is one of the duties of the personnel manager. The trouble, however,

with managers generally is that their sifting process is purely mechanical. It follows the line of least resistance. A man must have something in him if he is going to find something in other people.

You are aware that two people will read the same book and one will find nothing in it while the other will say that it is remarkably significant. The book is the same, the difference is in those who do the reading. It is commonly assumed that individuals are efficient or inefficient and that the environment plays no part in their achievements. The study of men of genius, however, has shown that great men are bunched in time and place. Is it probable that unusual numbers of men of exceptional ability are born during a certain period and in certain localities? Or is it more probable that the stimulating conditions of a period and region bring out the latent ability of men who would other wise have been unknown to fame.

Ability is not a mental quality that reveals itself regardless of circumstances. We do not mean that a man will be conspicuous for good judgment under one set of conditions and a fool at other times. But, as you are aware, there are different kinds of fools. We have men of excellent ability in physics or chemistry whose judgment is childish when they are dealing with psychological phenomena. Ghosts catch men of excellent reputation in matters which do not involve spooks. But personnel managers should be able to distinguish between ghost chasers and those who have visions that are worth catching. A Lincoln was needed to see the value of the plans for the Monitor. Naval officers and "experts" condemned the idea as visionary and impracticable. Then Lincoln's opinion was asked. "Well," he said, "I feel about the idea a good deal as the fat boy did when he put his foot into his stocking. He thought there was something in it."

Personnel managers often degenerate into mere employers of men. These managers are those whose mental attitude does not encourage freedom of thought among subordinates. It is rather an interesting psychological fact that a large number of men in positions of responsibility feel that they have a monopoly of wisdom concerning matters that relate to their work. It was this type of mind that saw nothing in Thomas Mott Osborne's prison reform notions. Those men had fixed ideas about criminals and the way in which they should behave and, consequently, they would not believe that criminals could respond to human treatment.

The same obtuseness to ideas with which they had no sympathy was observed in London surgeons when Lister proposed the use of antiseptics in surgery: "Nonsense," these wise London surgeons exclaimed, "Our experience proves that there are no infection-producing germs."

You usually get in this world what you plan for, provided you plan hard enough. Hard planning involves, of course, hard thinking and consistent actions. If one believes that a given method will succeed, the chances are that one will make a success of it. Those, on the other hand, who are convinced that the same method will fail will not be disappointed by succeeding. You cannot plan to fail and achieve success. Military history illustrates this. Probably McClellen was the best trained general on the Union side, but he never succeeded because he always prepared for failure.

In the same way a personnel manager who does not expect originality in his subordinates will never find it. The explanation is that, handicapped by this belief, the personnel manager sets wholly unstimulating conditions. It is a rare man who rises higher than the requirements of his job. Adaptation is an organic principle. If an organism meets requirements sufficiently to get by, it ceases to develop. In this respect human beings are like other animals. They struggle tremendously hard to meet conditions necessary for survival, but only rarely do we find one who puts forth the supreme effort necessary to rise from one economic level to another. If one's wage or salary is sufficient to meet living requirements with something left over for the joys of life, the individual is likely to rest contented. This was the meaning of the penetrating remark made many years ago by Rousseau. "No one, not even a child," he said, "wants to take unnecessary trouble." Adaptation is usually made unthoughtfully and hence unintelligently. Young people drift. They drift into the particular vocation which they choose and they drift into the amount of effort that they put into it after chance has selected their occupation for them. Our methods of work and the amount of effort which we employ are fixed by unconscious adaptation.

It is evident from the human characteristics to which we have referred that the kind and vigor of the reaction of men will depend upon the stimuli which require adaptive behavior. This is where the personnel manager shows his ability.

The only persons who are competent to be personnel managers are those who can inspire young men and women with the desire to accomplish things. A good many years ago William James wrote about the unused energies of men. It has long been known that individuals rarely use the ability which they possess. They adapt themselves to the conditions whether these requirements be high or low. Everyone has read of crack regiments in war. Now it is an interesting fact that the same regiment of men will be invincible under one leader but cowardly under

another. Apparently it is not merely the men, because, as we have seen, men are much alike, but it is the leader who makes the regiment invincible. "The [men of the] Thirteenth Division," says Sir Ian Hamilton in his Gallipoli Diary, "were not reliable at Helles, whereas now, under Godley at Anzac, they fought like lions." Fighting Joe Hooker's division in the Civil war offers further evidence that a leader creates the morale of his men. In the battle of the Wilderness this famous old division under another leader, less stimulating than Hooker, broke and ran, and a historian of this period says: "This once crack division has conducted itself most discreditably." Washington himself signally emplasized this personal quality of leadership in a letter to Colonel George Baylor in January 1777. "Recollect," wrote Washington, "that no instance has yet happened of good or bad behavior in corps in our service that did not originate with the officers."

Morale is, of course, a big factor in crack regiments, but it is equally significant in any organization; and its quality, good or bad, depends in large measure, upon the feelings of the rank and file about the way in which they are led and treated. In olden times the leaders both in war and peace were solicitous about those who, in colloquial language, did the heavy hauling. But today numbers are too large for the personal attention of those who are directing and managing. Morale, however, which is only another name for enthusiastic team work, is impossible without plans for putting men in the places for which they are fitted and for helping them to qualify for the new responsibilities. This is not sentimentality. It is good psychology and good business. "The city editor works with us rather than over us," said a reporter on a large daily paper recently. The personal influence of Dana of the old New York Sun and of Greeley of the Tribune were tremendous factors in the success of their newspapers. Personnel directors have merely assumed one of the functions of the old managers for which the latter no longer have adequate time.

Two qualities are then essential for a personnel manager. One we have just spoken of, that of leadership. But leadership is impossible unless the leader understands his men and has their complete confidence. Consequently, the second function of the personnel manager is to be on intimate terms with his subordinates so that he knows the thoughts, feelings and abilities of each one. We hear much today about testing ability. Tests have been devised for practically every line of work. But group tests that are of the impersonal sort, while not valueless, are certainly much less suggestive than individual tests in which the examiner

confers with those who are taking the examinations. It has been the history of every new educational movement that it has first aroused enthusiasm but has rapidly deteriorated into a purely mechanical procedure. This was the case with manual training. Its early teachers were tremendously enthusiastic and their enthusiasm spread to their pupils, but as time went on the work became more and more mechanized and, consequently, less stimulating to those who took it. In more recent years, again, vocational guidance was thought to solve our educational and vocational problems. But now, also, we find vocational guidance in large part reduced to rules and tests, with little reference to the personality of the individual. The explanation of this is the human characteristics to which we have already referred, namely, the tendency of man not to go to unnecessary trouble, to adapt himself to a low level of achievement provided that level will meet the situation.

The statement that water never rises above its source is old and trite, but its applications cannot be repeated too often. Man rarely, if ever, rises higher than the requirements of the situations which he must meet. Consequently one of the duties of the personnel manager is to create stimulating conditions. This is what the leaders of crack regiments did. Stonewall Jackson was always creating stimulating situations. If you look over the history of the Civil War you will observe that regardless of their other qualities the successful generals were those who aroused in their men an enthusiastic determination to win. In war this ability is of course not sufficient for success. McClellen had it. The spirit of his men was admirable. But in his case the arousal of enthusiasm ended the matter. When he should have carried on, he stopped.

Ability to create stimulating situations is tremendously important in personnel management. It is the personal influence of which we have been speaking. But there must be joined with it good judgment in the selections for advancement. Stimulation without an outlet ends in bitter disappointment. Young men who have been stirred to tremendous energy only to find that their efforts lead nowhere, quickly drop to lower levels of achievement. Men never work without reason. Hope may be deferred but the individual must see something at the end toward which he is striving or hope changes to despondency.

It has always been known that in war a retreat breaks down the morale of troops. One may come out of defeat with determination to begin a new offensive, but a retreat is demoralizing. It means hope not merely deferred, but given up. In a business organization, and your association may be thus designated, the same facts may be noticed. Subordinates

must not feel that their efforts to advance have produced no results. They need to see an outlet for their work. Some prospect must be observable. There should be a visible goal towards which they are striving and which they have reasonable hopes of reaching. Virtue is sometimes said to be its own reward. This is a pretty bit of human deception. A healthy virtue is never so virtuous that it does not appreciate appreciation. There is such a thing as an unhealthy virtue. The Puritan conscience of our forefathers is an illustration. It was so warped by its limited conception of virtue that it could not accomplish the ends it was seeking. Rigidity defeated its own purposes by its very lack of flexibility. It was so taken up with the means that it lost sight of the end.

Efficiency is a much abused word but in its best sense it is often defeated by unyielding strictness. Managers who become completely lost in the mechanism of details lose sight of the goal which they should keep in view. Only when one keeps in mind the larger purposes of an organization does one avoid the fate of those of whom it is often said, "They are so lost in details that they accomplish nothing." This larger vision includes, within its sweep, appreciation by superiors and finally a reasonable expectation of promotion to larger responsibility within the organization.

One of the difficulties of this sort of management is the fear of superiors, that they themselves may suffer if subordinates receive too much praise. Not every manager of an organization knows that his own reputation is enhanced by the success of subordinates. All of you are familiar with banking houses, with research institutions, with social organizations and with universities which are known chiefly by the names of those in charge and yet these individuals are not the ones who have made the organizations famous. These institutions have become known by the work of subordinates. But the glory of success has become so diffused throughout the organization that everyone connected with it benefits. You can think of medical research institutions of which this is true. These organizations are known by the names of the men who head them, but the chief accomplishments of these directors has consisted in giving subordinates a chance to do the things of which they are capable and in letting them get the credit.

Perhaps I might almost say that one of the chief functions of the director of an organization is to give subordinates the opportunity to reveal their ability and to accomplish what they are able to do. I may also say that a manager who fears lest his own light may be dimned by the brilliancy of subordinates lacks the essential element of managerial success.

To take an illustration in another field, President Lincoln's success as president was not lessened by the appreciation which his subordinates received. When informed that McClellan went to bed after being told that the President awaited him below, Lincoln said: "I do not care how the General treats me, provided he wins battles." And again, after Stanton had refused to approve some of Lincoln's recommendations and had told the man who brought one of them that anyone who would make such recommendations was a fool, Lincoln quietly remarked, "If Stanton says that I am a fool I must be one because he is almost always right."

Lincoln was fully conscious of what was said a moment ago, that the director of an organization gains reputation from the success of subordinates. He knew that his administration could succeed only through the success of those under him and he had the rare wisdom to select as members of his cabinet the greatest men among his opponents as well as among his supporters. Not only did he choose the men of the greatest ability but he gave them a free hand.

Thus the one name that stands out conspicuously as the successful manager of the Civil War is that of Abraham Lincoln. Perhaps one of the chief reasons for his successful management is his skill in selecting subordinates and in allowing them to work out their problems in their own way. They had the satisfaction that comes from creative thinking and their biographers today give them the credit that is their due, though the glory of Lincoln as general manager or director of our government during those trying years has not been dimmed in the slightest degree by the reputation of his subordinates. Perhaps it would not be too much to say that the success of his subordinates made Lincoln's reputation, since the wisdom displayed in their selection was a large factor in his greatness. We can see this in the remark which Lincoln made in reply to a friend who doubted the wisdom of appointing Stanton Secretary of War. In the earlier days Lincoln and Stanton had been on the opposite sides of a legal case and Stanton had treated him so rudely that he had felt obliged to withdraw from the case. "I have never been so brutally treated in my life as by that man Stanton," he said on his return from the trial of the case. When he decided, against the advice of friends, to make Stanton his Secretary of War he said, "We may have to treat him as they are said to treat a Methodist minister out west. He gets wrought up to such a pitch of excitement by his prayers and exhortations that they are obliged to put bricks in his pockets to keep him down. We may be obliged to treat Stanton in the same way, but I guess we will let him jump awhile first."

In this story we find perhaps the keynote of Lincoln's success in dealing with men. The personal equation played no part in his selection of men or in his judgment of them. He wanted capable men in his administration and history has shown that he finally secured them. To be sure, he was slow in finding men who could lead the Union armies to success. But the right men did not exist at the beginning of the war. Grant, Sherman, and Sheridan had to go through a process of growth before they were ready for the responsible positions which they later filled. Lincoln was aways looking for the right man and he did not allow personal prejudice to obscure his vision. Neither did he fear that the fame of superior men in his cabinet would obscure the brilliancy of his own reputation.

Tests tell us much about young people, provided they are not mechanized, but the final selection of men must always remain a personal matter. It has been said that one can never judge a man until one can see him in action, and this statement contains much that is true. There are many men of vast knowledge who are unable to apply what they know, and it is in action that the ability to use knowledge reveals itself. The personnel work of the manager is not merely to give tests and to keep records, but also to act as confidential adviser to the subordinate men and women in the organization. He knows or should know the lines of reading which would be profitable for different ones, and he should know what those in the organization are doing with their spare time. He may help some who are worth saving, to discover their weak points. Many times failure to obtain advancement is not so discouraging as the thought that one has been overlooked. It is a sad commentary on business and social organizations that success does not attract so much attention as does failure. If you look back over the history of municipal politics you will observe that the voters are not so much concerned with retaining a good administration as they are with putting rascals out. A good city administration runs so smoothly that it does not attract attention. The voters become apathetic and those who are responsible for the good government are quietly and unostentatiously voted out of office at the next election because their administration was too successful to attract the notice of the voters.

Business and social organizations are not different in this respect from city administrations. The Athenians, you know, grew tired of hearing Aristides called "The Just." But one also grows weary of well doing, when one's accomplishments are unappreciated. This, perhaps, is the justification for a personnel manager. You know it is rather popular today to ask the question "why" with regard to men and events. At

present articles are appearing under the title "Why Smith?" and in the same way we may ask the question "Why personnel managers?" The answer to this question is that human psychology requires that large organizations have some official whose business it is to recognize success and to fix responsibility for it, as well as for failure. "I am only noticed when I make a mistake," remarked a young business man recently.

We are coming to realize more and more today, that personality does not consist of any one characteristic. It is not all intellect, it is not wholly emotion. It does not depend altogether upon the quality of cerebral tissue. We know today that all parts of the human physical organism play their rôles in producing what we call the personality of the individual. The stomach, the liver, and the endocrine glands are as important as the cerebral cortex itself. The distinction of "higher" and "lower" is an untrue classification, and it is the same with social and industrial organizations. There should be no higher and lower. The chief importance of the president or the general manager lies in his ability to correlate and coördinate the work of all the individuals in the organization. To illustrate again from military history, competent critics have expressed doubt of Grant's strategical ability. But Grant knew a valueable man when he found him. And he could learn from experience, which is a much rarer quality than some individuals are inclined to think.

Experience is the best teacher is a common phrase and as erroneous as it is common. Experience may be either a good or bad teacher. Ordinarily it teaches us what we wish to learn. English and Scotch surgeons tried Lister's antiseptics but did not get his results. Without intending it they planned for failure. Our experience usually gratifies our wishes. It is a rare man or woman who can view experience objectively and impersonally. Lincoln was able to do this. As we have seen, he put men in office who had treated him with contempt. "I have heard," he wrote Hooker, "Of your recently saying that both the army and government need a dictator. It is not because you said this, but in spite of it that I have given you the command of the armies." Personal objections played no part in Lincoln's choice of men. He wanted those who could do things.

Grant had the same valuable quality. He appreciated the success of subordinates and gave them credit for their achievements, knowing that the success of his armies would bring victory to the cause to which he was devoted and redound, finally, to his own glory. Grant never made the same mistake twice, and if the statement of military critics that Stonewall Jackson did not make a military blunder during his entire career is

true the explanation is in large part that he selected subordinates upon whose judgment and ability to act, he could depend. Great men in any large organization are great chiefly because of their wisdom in selecting their subordinates and on account of their appreciation of ability when they discover it.

Some men need assistance in discovering their ability and there are those, again, who are never able to stand quite alone. But with leadership these men at times display surprising power. Some of Napoleon's marshals were of this type. They excelled when Napoleon himself was in command, but when alone or under other leaders they were not quite able to meet situations. Selecting men and then studying them are the first essentials of leadership. The human tendency not to go to unnecessary trouble of which we have spoken, causes men to grow to the smallest dimension of their job and then to stop developing. The value of stimulating incentives we all admit. It has been found true in military matters and it is equally true in other organizations.

It is a commonplace today that man is a reacting animal. The statement that an adequate stimulus is needed is equally trite. Yet in the outside world of life, little or no attention is given to creating incentives. Motivation is a slogan in the schools but we forget that adults as well as children must have an adequate reason for excelling.

When Roosevelt became Police Commissioner of New York City he found the department honeycombed with inefficiency and the explanation was that there were no incentives for using one's ability. If a policeman displayed unusual bravery, no attention was paid to him. Consequently, since excellence was not noticed, there was no inducement to excel.

Roosevelt immediately inaugurated a change. When he read in the morning paper that Patrolman Jones had shown unusual bravery in a desperate situation he directed his secretary to call the patrolman to headquarters that he might thank him. Previous to Roosevelt's tenure of office, if the uniform of a policeman was injured in the performance of his duty the policeman himself had to meet the bill. Consequently, two conditions operated strongly against efficiency in the department, first, efficiency was not noticed, and second, the policemen suffered financial loss when they were efficient because they had to pay the damage costs. Clearly, efficiency could not be expected, and yet the same psychological obstructions exist in many social and civic organizations today. To be sure, in these organizations subordinates may not suffer financial loss, but tactfulness and good judgment do not bring the appreciation which they merit.

The method of advancement which is usually employed is promotion by seniority. The reason for this is that it is the simplest and easiest method, and it does not require intelligence. The fact has been emphasized that man commonly follows the method which will cause him the least trouble, and promotion by seniority can always be justified by the number of years in service. It does not, however, meet the needs of efficiency because the man next in line for promotion may be wholly unsuited for the responsibilities of the higher position. If there are no observable differences of ability in men who have been working for a time in factory or office, the management is to blame. Ability must be drawn out. It is always found that situations which are tempting to abilities of various sorts produce them. It would be more correct to say that these tempting situations grip those who have ability.

Possibilities of achievement entice young men and women who are capable of being aroused. Those without ability never get stirred up. They are hopelessly placid. They accept things as they are because their gray matter does not permit undue activity. When Theodore Vale became president of the Western Union Telegraph Company a writer with a touch of humor remarked that all that Mr. Vale did, was to put new life into a hopelessly inefficient and demoralized force. That is what a leader always does.

In the late war, leaders took men gathered from docks and offices and made them into crack regiments. Those commanders who could not lead made the same kind of recruits into good runners—away from the enemy. In municipal government, again, a leader makes over an apparently hopeless rabble of office workers into a responsible orderly staff.

Personnel management—finding the right place for a man, and a man for the right place—has been so completely overlooked in the struggle for big things caused by the rapid growth of industry that a renovation of habits is necessary. Old habits of thought and action do not meet the present requirements of efficient organization. Whoever would lead men today must be, so to speak, born again, at least as far as his habits are concerned. This is a fact which must not be overlooked, because if one can utilize one's old habits in a new office one is bound to do so. Change of habits is not pleasant; it always produces a mental wrench. Following old customs brings a feeling of peacefulness and satisfied complacency. It is not without reason that pioneering periods are the most successful, since old habits do not fit pioneering life.

The great psychological advantage, for example, of the new method in the University of Wisconsin of inducing freshman to get educated, is not

so much the change of subject matter. This new approach to education is not better than many other ways of inoculating college students with knowledge, but the advantage lies in the fact that habits of students and professors alike will not fit into the new plan. Consequently the best that is in the instructors and students will be drawn out. Greater distinctions in ability will be made both among instructors and students. Those of ability will respond to these new opportunities in large part because the habits of work which they have previously acquired under other conditions will not meet the new situations.

Nature has followed a similar method in her dealings with the various creatures for whom she has acted as a sort of personnel manager. The chief difference between her way of managing and that of man is her relentlessness. Nature sets her requirements just a little ahead of previous demands and those animals that cannot meet them perish. She is always offering alluring inducements for advancement, always creating tempting situations, always presenting opportunities for the improvement of species. But nature is rigidly mechanical. She makes no effort to assist in the adapting process and she has no personal interests. She deals only with the species. The human personnel manager, on the other hand, is concerned with the individual, but if he does his duty by him he will have his time fairly well occupied with a mighty interesting problem without troubling himself about the human species.

MARKETING AND MENU-PLANNING[1]

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Marketing and menu-planning are closely and vitally related. Food administration eventuating in a satisfying adequate diet, begins with food purchase. It is impossible to serve a balanced ration if the necessary materials are not available. While availability of the necessary materials does not insure the service of an adequate diet, since preparation and service may make ineffective the most careful buying, still it is the first step.

The purchase of raw materials for the institution kitchen is more difficult than for any other manufacturing plant. Food materials are many, various, and difficult to standardize. The food buyer needs for a background as intimate a knowledge as possible of production, whether apples, tomatoes, or rib of beef be the subject of immediate concern. Information concerning methods of distributing, whether of strawberries in January, or spinach in June, is also vital. A knowledge of the food product itself is necessary. Price is not an adequate basis on which to determine purchase of good materials. The factors which determine the price difference, and their effect on the quality and the suitability of a given article for a given purpose, are especially significant. To buy an apple for salad or baking purposes requires a knowledge of varieties, with their characteristic qualities, and of season. Quality and price in the manufactured article, as for example in a product like macaroni, are determined by the process of manufacture and by the quality of the raw material since these determine the quality of the finished product. Intimate knowledge of food stuffs is essential for both buying and successful meal planning.

In the purchase of food materials three groups or classes of food are represented: the so-called standard groceries, such as canned goods, sugar, condiments; the semi-perishables, such as flour, oils, fats, cheese, coffee; and the perishables, consisting of fresh fruit, fresh vegetables, meat, fish, milk, eggs. There are many buying problems tied up with

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each class, but the perishables present the most difficulty. The standard groceries and semi-perishable stock, are bought in large quantities and at infrequent intervals and hence require the attention of the buyer only a few times each year.

In the standard class, where the product undergoes elaboration or a manufacturing process, wholesomeness is very important, and in the special care of the Federal Government and of the Food Departments of the states. Food laws have materially reduced the problem of unwholesomeness. Canned products in the main, are little open to criticism. Chemical and bacteriological analysis by State and Federal agencies, and commercial competition, are generally effective in giving us wholesome products. In our evaporated fruits too heavy chemical treatment is still practiced and is objectionable, but here the dehydrated product carrying lower water content and hence minimizing the chemical treatment required, promises much for a more wholesome product. More information gathered from long-duration feeding experiments is needed in many important products, such as leavening agents and bleached flour.

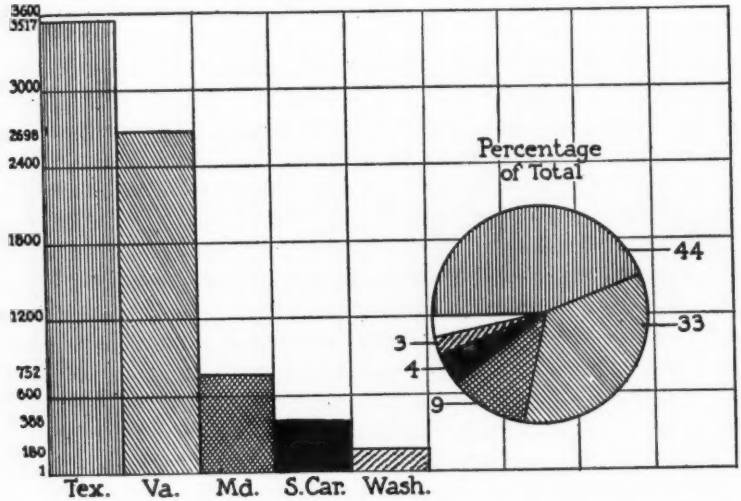
The perishables need constant and intelligent attention and daily shopping is necessary. The perishable products also require close supervision after purchase, both in store room and in kitchen, as the possibility of the largest waste is found here. In the perishable class, wholesomeness, or its lack, is not a problem. The perishables, appetizing, palatable, attractive in form and color, are the materials on which the menu-maker depends for rounding out the diet and above all rendering it satisfying,—that elusive quality in food hardest to attain. Color, odor, flavor, for these we go to fruits and vegetables. The color of the peach, the beet, the carrot, the flavor of the mushroom, of celeriac, garlic, salsify, the odor of the cucumber,—all help the food director in supplying adequate and satisfying meals. The aesthetic quality of food,—color, odor, flavor—is contributed chiefly by the perishable fruits and vegetables. Their skillful use banishes monotony and is largely responsible for appetite and for enjoyment of food, factors now known to have an important bearing on digestion. In this connection attention may well be called to the food resources still commonly unused in avoiding monotony in diet. While the markets of our large cities and the smaller outlying ones supplied from the larger centers, show a list of about fifty vegetables, for example, in their offerings for the year, not more than thirty are commonly used. Several class surveys

conducted at Chicago show in the "Known but not used" group, such vegetables as artichoke, beet greens, celeriac, savoy cabbage, chard, collard, cress, egg plant, garlic, kale, kohlrabi, leek, okra, paitsai, parsley root, romaine lettuce, rutabaga, salsify. A survey, too, of such food products as cheese or tea, discloses further resources generally unknown and unused.

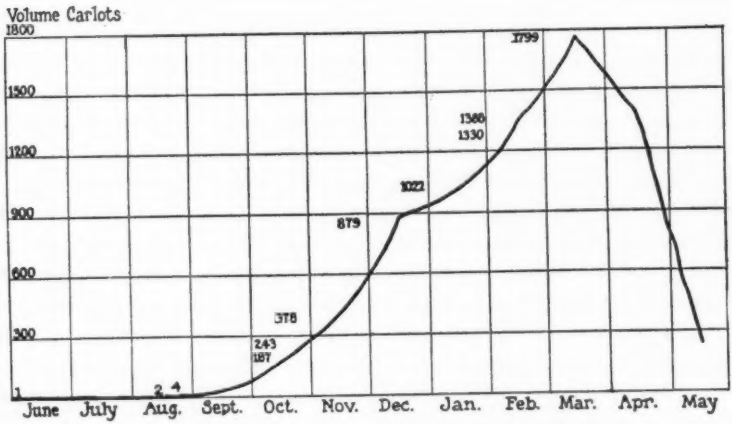
The major considerations in menu-making are dietary balance, cost, and satisfaction. The menu-maker's chief and constant problem is to so plan as to offer a ration dietetically adequate; dietary balance is first of all sought. Cost is also a limiting factor and what may be called a cost balance must be maintained. The budget for the meal and the day must be carefully adhered to, and presents a problem for the exercise of skilled judgment. Satisfaction of the guest must also be secured, a factor no less vital than that the ration should be adequate and meet the limits set by budget requirements. Satisfying food must be appetizing, attractive, palatable, and real skill is required in its production. The contented guest for thom a diet showing no food deficiencies must be provided is the special concern of the dietitian. The individual in the institution group is likely to be dissatisfied with the diet offered in degree as his individual preferences are disregarded. Racial and religious food customs also complicate a problem already sufficiently difficult.

With the above major considerations in menu-making in mind, what as an aid, has marketing to offer? Certain aspects of our study of food products as presented in courses in Institution Marketing have a direct bearing on the work of the administrative dietitian. Take first the studies made of the source of our commercial supply of food products. Information concerning the source of a product makes for intelligent judgment of both quality and price. Take the October tomato. On the market we find the local tomato in box or bushel basket. It represents the last of our out-door-grown Northern stock. The flat, carrying four baskets, is also available, coming from the middle Southern region where fall frosts are delayed. The green house tomato is also available, appearing in the market basket holding about ten pounds. Later in the season tomatoes from California, Florida, and New Mexico appear, each in a characteristic package and of characteristic flavor. The differences in packages and stock, when understood, are significant for the careful buyer. The orange from Florida, juicy, sweet, and suitable as a desert fruit or as a source of juice, is characteristically different

from the California orange, less juicy and sweet, tender and seedless, and especially suitable for salad purposes.



GRAPH 1. TOTAL VOLUME FOR CHIEF REGIONS PRODUCING SPINACH—THREE-YEAR AVERAGE—1924–1926



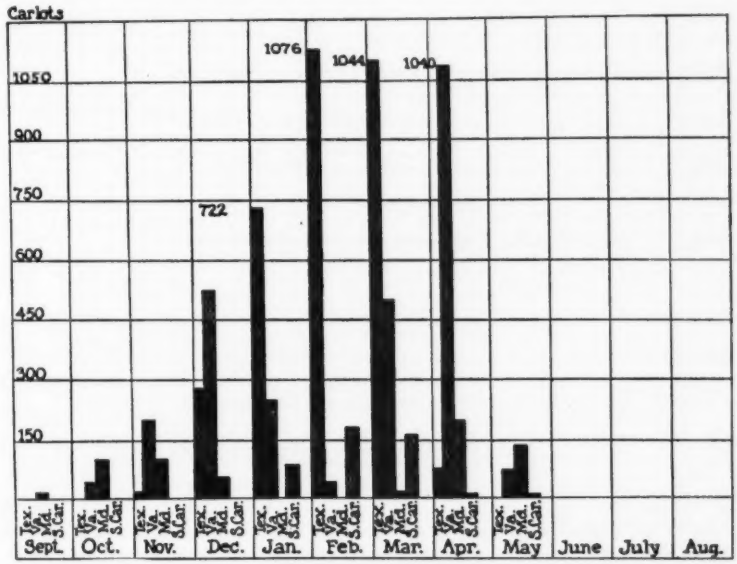
GRAPH 2. TOTAL VOLUME CAR-LOT SHIPMENTS OF SPINACH FOR ALL REGIONS—THREE-YEAR AVERAGE BY MONTHS—1924–1925–1926

The season when, and the period during which a product is available, and when available in the largest volume, should be reflected in the

carefully planned menu. When a product is at its peak it is, other things being equal, also best and cheapest. Suppose a specific product like spinach be taken to illustrate.

The above results and those shown in the following graphs were compiled from data furnished by the Federal government for car-lot shipments. The years 1924, 1925, 1926 were studied and the average of the three years used in determining the results presented.

In Graph 1 it is seen that only a few states produce spinach for commercial shipment. Spinach is bulky and highly perishable and the

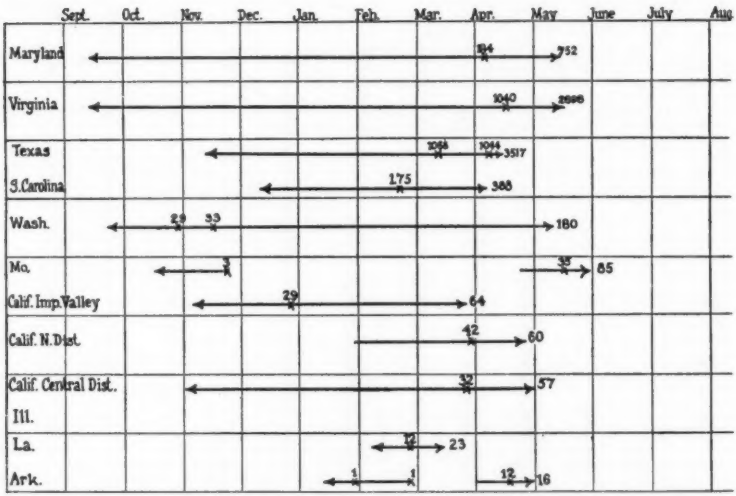


GRAPH 3. SPINACH—CAR-LOT SHIPMENTS—THREE-YEAR AVERAGE—1924-1926

producing regions are relatively near to the big consuming centers of the East and Middle-West. Texas, Virginia, South Carolina, Maryland, are seen to furnish the bulk of our supply, with Texas and Virginia leading, Texas with an average for the year of 3517 cars.

Graph 2 presents market information of distinct value in menu planning. It is clearly seen that the great bulk of our spinach crop is produced and is available in the winter months; January, February and March are months of peak production. Spinach is a heat intolerant plant and its production is abruptly terminated, it will be noted, by the

onset of warm weather. The summer months—June, July and August—represent the zero point in production. During this season our menus, if featuring spinach, must depend in the main upon the canned or dehydrated product. The dehydrated spinach is now available and is a very excellent product. I should like at this point to call attention to an unusual resource, New Zealand spinach (Tetragonia expansa). This summer spinach is heat tolerant, as its name indicates, and is available throughout the summer. It represents spinach in appearance, has numerous, thick, fleshy, tender leaves and a flavor more generally



GRAPH 4. CALENDAR OF SHIPMENTS FOR CHIEF PRODUCING REGIONS OF SPINACH—AVERAGE 1924–1925–1926

acceptable than that of spinach. It is easily raised but at present is not marketed successfully. It is undergoing that slow and uncertain process known as "introduction" on the commercial markets of the country.

Graph 3 makes clear at a glance the chief regions of production and the volume of production for each month. Here again the "peak production" months of winter and the "no production" months of summer are shown.

Graph 4 shows the producing regions, the months of production and the period of peak production for each region indicated by the "X." The number of carlots shipped at the peak is also shown. It is seen that

the first two weeks of April are spinach weeks. At this time spinach is being shipped by practically all of the producing regions. The peak of production for the chief regions also falls in this period.

Celery and cauliflower and many other products show a similar marked seasonability which must be understood if best use is to be made of the product.

In securing the cost balance in the menu, constant use must be made of the knowledge of price. Salad material, such as vegetables, meats, fruits, fish, may be made, on the basis of price, into high, medium and low-priced groups. Such a grouping for bulk salads was recently completed by Margaret Terrell under our direction. The results of the study are significant and valuable in planning a menu properly balanced as to cost.

	Cost per serving
Vegetable Class:	
High price, tomato	$0.0573
Low price, potato	.0136
Price range	.0437
Average price	.0339
Fruit Class:	
High price, pineapple and cheese	.0475
Low price, sliced oranges	.0334
Price range	.0141
Average price	.0396
Meat and Meat Substitute Class:	
High price, crabmeat	.1128
Low price—deviled eggs	.0368
Price range	.0760
Average price	.0567

Such data are indispensable in securing the cost balance of the menu and more data of like nature are needed.

Closely related to price, and reflected in price, are the factors of package, variety and elaboration of the product.

The importance of the package in determining price may be illustrated by comparing the price per pound paid for sweet potatoes by the barrel or by the $\frac{7}{8}$ bushel hamper. The Irish potato, now common in the bushel box of about 45 pounds, filled with carefully graded stock, reflects a high added cost due to unnecessary elaboration. Variety of a product and its bearing on price is seen in the sweet potato. Nancy Hall, an early potato of the so-called "yam" type is selling on the fall

market about 75 cents per hamper cheaper than the better known Jersey. Dried fruits also illustrate this point. The grades commonly recognized are:

Extra Fancy
Fancy
Extra Choice
Standard
Slab

These grades are based on size and quality, hence a knowledge of the varieties dried is illuminating. The Moorpark is a large apricot with heavy thick flesh which is somewhat porous and fibrous; in flavor it is sub-acid. The Blenheim is a smaller apricot, firmer, thinner in flesh and more acidic than the Moorpark. The Royal is a small, sweet variety which is also canned in large quantities; a small, high quality apricot. Because of size the Moorpark is seldom graded lower and the Royal seldom graded higher than extra choice. A difference of $2\frac{1}{2}$ cents per pound is usually found between the Moorpark and the Blenheim and the same difference between the Blenheim and the Royal; there is, a price range of 5 cents per pound, based chiefly on size. Each of these varieties is in turn graded with a price difference of $\frac{1}{2}$ to 2 cents between the grades. Thus a 6 or 7 cent difference per pound may maintain in a situation where size as it inheres in variety, and not quality or value, is the factor determining price.

Studies such as these show how large the need is for making exact studies in the field of Institution Economics. Control of our food materials through a carefully kept system, making use of the principle of the perpetual inventory, is essential. Numerous sytems of the index visible file type are now available. No food cost accounting is possible without such records and no exact data accumulated. Records of operation would make it possible to determine the price range in products for the year, the high and low, and these used to determine the average price for the year. Even more important would be the determination of the price norm, or the most frequently occurring price and its percentage value. Such data are very necessary in determining costs and selling prices. The commercial institutions, like hotels and restaurants, under the urge of profit-making have done much more than hospitals or schools in applying business procedure to the problem.

A digest of prices would also give definite understanding as to the influence on price of such factors as season, quality, variety and grade.

We also need to make careful studies of market reports over a period of years in order to determine the seasons of plenty and scarcity for numerous food products. Knowledge of the season of peak production and of the price range for the year would be the basis for making up the weekly and monthly food lists. Menus so made would not feature lamb in January, fresh roasters in February, chop suey in June, orange salad in July, or spinach in August.

Studies made of the purchase sheets would add to our information as to the distribution among the food groups of the money spent. The percentage distribution now in use needs verification through many more studies.

It is hardly necessary, but it may be heartening, to remind a group of dietitians of the importance and vitality of their work. The work of the dietitian gives an opportunity for social service of rarely high order. The field is relatively new, and like many others awaiting adjustments with closely allied fields. The work of the administrative dietitian is increasing in importance and scope. The earlier accent on the corrective diet is now paralleled by that placed upon the normal diet, just as preventive medicine is now supplementing corrective treatment. The normal diet kitchen is rapidly assuming a new and important rôle in the work of the hospital. The administration of the food unit involves problems in organization which include both the building and the personnel. The various parts of the unit must be effectively related and the working force properly placed for best results. Equipment problems are present, in which materials, construction, and placement are involved and must be considered. The engineering aspect of equipment also has a way of pushing to the front, often unexpectedly, and announcing its importance in disconcerting fashion. The administration of an institution kitchen equipped with modern machinery calls for information concerning materials, construction, installation, operation, and care. The dietitian needs to draw heavily too on psychology, sociology, and ethics in meeting the many management problems involved in the direction and instruction of workers. The care of the building, of general supplies and of food, gives opportunity for the use of much "applied science." The work of teaching student nurses is also frequently a part of the work of the dietitian and here pedagogical skill is called for.

Important as the problems of organization, management, and equipment are, the chief concern of the dietitian centers around food—food, its

purchase, preparation and service. The importance of making the dietitian responsible or all purchases may well be emphasized. Complete control of a department, for which the dietitian is made responsible is essential. No executive should be willing to be held responsible for final results unless she have full control of all activities contributing to the character of that result. This is especially true of the foods which constitute the materials for menu-making. Selection, involving kind, quality, quantity, price, as well as the making of the menu and the preparation of the food, should be under her control. The institution kitchen is a factory where raw materials are many and extremely varied, and whose finished products change with the season, the day and even with the meal. Only the menu-maker herself can purchase intelligently. It would seem that no adequate reason can be given for placing the purchase of the raw materials in the hands of any other executive since no other can be so well qualified. The reasons for making the dietitian responsible for all purchasing are most obvious. It work only were involved in the purchasing activity it would undoubtedly be placed without question as to the competency or incompetency in the hands of the administrative dietitian. It would seem that frequent and insistent emphasis should be given to this matter so vital to the efficient operation of the food unit and to the professional standing of the dietitian.

If the preparation and service of food are to reflect the ideals and standards of the dietitian, intimate knowledge of preparation processes must be had. Knowledge of large quantity manipulation and standardized formulas for each item of the menu constitute her stock in trade. One of the outstanding contributions to Institution Economics is that made by Cora C. Colburn and Ella C. McKenney. The large-quantity, standardized formulas worked out by them have been given to successive classes of their students, and through them to others; food preparation for the institution has been vitally influenced by their work.

The training required by the dietitian is broad and is being steadily broadened and enriched as the importance of the diet in promoting health is recognized. Given more and better training with increased capacity to deal with the complex and exacting problem of food administration, and an ever larger opportunity for service will be open to the dietitian.

OUTLINE FOR STANDARD COURSE FOR STUDENT DIETITIANS IN HOSPITALS[1]

The Section on Education wishes to call the attention of all dietitians, and particularly those dietitians who are interested in the training of student dietitians, to the outline of a Standard Course for Student Dietitians as given below.

This outline was approved at the business meeting of the American Dietetic Association at St. Louis, October 1927. As was recommended by the vote of the members present, copies of this outline will be distributed to the American Hospital Association, and to the American Home Economics Association. This general publicity will inform both groups of the fact that the American Dietetic Association has set a standard for minimum requirements which should be included in the training of student dietitians, and that future dietitians will have such training. This will give superintendents a basis for judging applicants for positions as dietitians.

By questionnaire and correspondence the committee will try to ascertain how many hospitals are following the outline of the approved course for student dietitians, and publish a list of these hospitals in the March number of the JOURNAL OF THE AMERICAN DIETETIC ASSOCIATION.

Such a list should be of great assistance to faculty members of Home Economics Schools and Colleges who are selecting hospitals to recommend to their students to enter for hospital training, and to the students themselves in making their choice.

I. General Organization of Hospital
   A. Recognition
      1. A. H. A. Membership of the Hospital
      2. All dietitians in constant employ eligible for membership in A. D. A.
      3. Accredited Nurses Training School
   B. Capacity
      1. Bed for 100 or more patients

[1] Adapted by the Committee on Education from the two outlines submitted to the American Dietetic Association in October, 1926.

C. Dietary department
  1. Organization
    a. Chief dietitian responsible to superintendent of hospital for the administration of the dietary department
  2. Organization of service—dietitian's supervision to control:
    a. General diets for patients
    b. Therapeutic diets of varied types
    c. Child feeding
    d. Infant formulae
    e. Private room service
    f. Personal dietaries

Note: Arrangements for meeting any of the above requirements by affiliation with other institutions may be made with the approval of the executive committee of the American Dietetic Association.

II. Entrance Requirements for Course for Student Dietitians
  A. Age at least 21 years
  B. Education—Minimum: Bachelor's degree with a major in Foods and Nutrition from a college or university of recognized rank

III. General Organization of Course for Student Dietitians
  A. Provision for constant enrollment of at least two students
  B. Length of course—six months or longer
  C. Required hours for students
    1. Duty—at least 42 weekly under supervision of dietetic staff
    2. Attendance at conferences, classes, or seminars at least once weekly
  D. Certificate offered upon satisfactory completion of course

IV. Content of Course for Student Dietitians
  A. General summary
    1. Administrative practice
    2. Dietotherapy
    3. Theory of teaching dietetics to pupil nurses
    4. Optional duties
    5. Study, conferences, etc.
  B. Specific outline—duties of student dietitians in
    1. Administrative practice
      a. Time spent—two months or longer
      b. Practical work to consist of

(1) Observation or practice in assuming duties in all divisions of the dietary department including:
Office
Main kitchen
Serving rooms
Dining rooms
Store room
Distributing and serving departments for ward and private room trays
(2) Planning and adapting a series of at least two weeks' menus to particular hospital
(3) Computation and recording content of food intake for one day of each group of normal diets fed by the department
(4) Computation and recording of cost of one day's food supply for the hospital

c. Theoretical work to consist of conferences with those in supervisory charge regarding:
*(1) Organizatin of personnel of department
(2) Operation and control of equipment
*(3) Planning layouts and selecting equipment
(4) Marketing procedure in particular hospital
(5) Storeroom management in particular hospital
*(6) Reference books and publications and commercial concerns or significance in dietary administration

Note: Permanent record to be made by student in starred conferences.

2. Dietotherapy
a. Time spent—two months or longer
b. Practical work to consist of
(1) Actual experience in routine of therapeutic diets, (including infant and child feeding) which should consist of:
Planning
Calculating
Preparing
Distributing
Serving
(2) Interpreting chart and laboratory records

(3) Interpreting doctors' orders
(4) Interviewing and instructing patients on special diet régime

Note: All of this work must be done under the supervision of the dietitian, but toward the end of the course the student should be able to do it independently.

c. Theory of dietotherapy
1. Study conferences, etc., to consist of
a. Satisfactory completion and recording of at least one assigned problem
b. Class or seminar work of at least one hour weekly consisting of either
Conferences with supervising dietitians or doctors
Reports on special assignments
Round Table Discussion
2. Permanent bibliography of reference books and periodicals of value in Dietary Department
3. Theory of teaching dietetics to pupil nurses
a. A study of the contents and methods of presentation of courses in Dietetics for Student Nurses
4. Optional Duties—which may be included in remainder of time alloted to the course or which may be substituted for the essential contents of course, as outlined, upon approval of the Executive Committee of the American Dietetic Association
a. Social Service Assignments
b. Medical Clinic Assignments
c. Metabolic Ward or Laboratory Assignments
d. Field trips of value to dietary profession
e. Housekeeping and Laundry
f. Affiliations of any nature which will make the content of the course more complete

Dr. Ruth Wheeler

EDITORIALS

It is fitting on our Tenth Anniversary that we express our appreciation of Mrs. Ellen H. Richards, who has passed on to us a rich heritage of ideals. To Dr. Ruth Wheeler, who has animated us with the spirit of these ideals, we owe a debt of gratitude. These women, and the Presidents who have guided the Association for the past ten years, have blazed a trail for all to follow.

The Association may well feel optimistic as we look back over the first decade of our existence. The dietitian may be a comparatively unknown species abroad, but she has definitely made a place for herself during the last ten years in America; professional organization has been the chief factor in finding this place in the sun. The high standards that our national group has striven for in the past are now reflected in the attitude of affiliated organizations toward us.

The JOURNAL, born of the courage and vision of Ruth Wheeler, has attained an enviable place for a newcomer in the crowded ranks of kindred professional publications. We point with justifiable pride to the *Journal of the American Medical Association* for October 29, 1927; the leading editorial is based chiefly on a paper that appeared recently in the JOURNAL of THE AMERICAN DIETETIC ASSOCIATION. In the same issue, nearly a column of "Current Comment" is devoted to another article written by one of our members for our JOURNAL. The *Quarterly Cumulative Index Medicus*, Vol. 1, January–June, 1927, contains six references to the JOURNAL A. D. A. out of a total of forty-three listed under *Diet and Dietetics*. Thirty other journals were referred to, giving our publication a good majority over the others. When one considers that the JOURNAL only appears quarterly, the above is an excellent indication of its standing in this special field.

NEW YORK CITY SCHOOL LUNCHES

The *New York Times* for October 31st made public a report of the School Lunch Inquiry Committee on the situation in the city school lunch rooms. At present the operating manager is a teacher-at-large, without requisite authority. Food is served by concessionaires with the result

that there is a distinct deterioration in the quality. Costs are rising while concessionaires make money by serving unsupervised and often unwholesome food.

It was the consensus of opinion of the Committee that those in charge of the lunch rooms should have from six month's to one year's experience as manager of a cafeteria or similar extablishment. On this point the report says: "The Committee agrees . . . . that the operating manager and supervisory dietitians responsible for the food in the public school lunch rooms shall hold such qualifications as would make them eligible to membership in the professional association of dietitians—the American Dietetic Association." Representative members of the Committee are Dr. E. H. Lewinski-Corwin, Executive Secretary, Public Health Relations Committee of the New York Academy of Medicine, Mary Arnold, Executive Secretary, Children's Welfare Federation, and Dr. M. Alice Asserson of the New York Tuberculosis and Health Association.

Editorials in hearty agreement with the conclusions of the report appeared in the press. It should be gratifying to our Association that such a report refers to our qualifications for membership as a determining factor in selecting competent operating managers.

Christmas in a New Zealand Hospital

December twenty-fifth, southern hemisphere, corresponds very nearly with June twenty-fifth, northern hemisphere—the time of longest days, and the period of sweet peas and roses. There is no holly to decorate the hospital wards, no wreathes to hang in the windows. The holly was at its height in July, as the hedgerows testified; and this is December. Instead of a red and green Christmas with frosty air, flying snow and sleigh bells, it is a pink Christmas with sweet peas in profusion, roses everywhere, and just to vary the color scheme, the yellow and orange hues of Iceland poppies, the ivory white of the "Christmas Lily" (our Easter lily), or again the Arum lily, which we call calla. Here we do not come blustering in out of the chilly blast, shaking the snow from our shoulders, stamping our feet to warm them, and depositing an armful of green with its cheery red berry—or the waxen berry of a sprig of mistletoe. We wander in leisurely in summer frocks, with baskets of fragrant late spring bloom.

The nurses of the various wards vie with one another in the decoration of their own domain. One ward may be a rose garden, another an arbor

of sweet peas, a third a poppy field. The wards are finally decorated on the twenty-fourth. And Christmas Eve, about nine o'clock, the candle-light procession of carollers starts from the Nurses' Home, led by the Matron, the sisters following. Each nurse looks picturesque, indeed, in her flowing veiled cap and carrying a torch. Once more we hear "Good King Wencelaus," "Noel" and all the old songs from Merrie England brought out to the smallest of Britain's Dominions, half way around the world.

And the dinner? There never was such a dinner—a mingling of old customs and new. A bowl of flowers graces the center of the long table placed in each ward; the rest of its furnishings are for interior decoration. At one end rests the ham, or "cold joint," then a platter, or to use a good old Scotch term "achette" of roast beef. The turkey, the duck, the goose, and the boiled fowl are also there, and to make the meal thoroughly New Zealand, spring lamb with fresh mint sauce. New potatoes and garden peas, the first of the season, are indispensable. And for "sweets," the "cold shape" a gelatine or blanc mange, a fruit pie (fresh fruit stewed in a deep dish, with top crust only), and the plum pudding without which no English Christmas would be complete. There is also the New Zealand fruit salad—a compote of fruits; passion fruit makes it distinctive. This fruit is a cross between the plum and the pomegranate with a seedy pulp similar to the latter.

At the noon hour, the "honorary" or attending physician arrives plus his carving set, and with the assistance of the house surgeon, the sister and the nurses, proceeds to carve and serve that all may be satisfied—grace having first been asked. There is fowl for some and turkey for others—and some, alas, may have only the broth made from some of that fowl. But they have feasted their eyes, and in that they are happy. Custom asks for a variety to gaze upon.

And is all this eaten the same day? No, there is Boxing Day to reckon with, not pugilistic as you might suppose, but the day according to the old custom when boxes of good things were given to the servants. In other words, having given pleasure to those they serve, it is now the servants turn. And so this custom of an additional holiday on the twenty-sixth is still extant, even in far away New Zealand.

ELEANOR WELLS,
Dunedin Hospital, Dunedin, New Zealand.

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P. 53. Relation of maternal diet to hemorrhage in the newborn. C. Ulysses Moore and Jesse Laird Brodie.

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P. 187. Inorganic blood phosphate—studies of rats on rachitic and non-rachitic diets. Elizabeth M. Koch and Meyer H. Cahan.

September, 1927.

P. 364. Antirachitic properties of irradiated dry milk. G. C. Suplee and Odessa D. Dow.

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P. 606. Interesting features of a rural outbreak of cholera due to infected drinking water. Hilario Tara.

P. 635. The effects of changes in the sugar content of the blood on bird malaria. Mary Stuart and Mae Dougall.

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P. 708. Occurrence of the colon group on commercial candies. John Weinzirl.

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P. 1019. Milk-borne diseases in Massachusetts. George H. Bigelow and Filip C. Forsbeck.

P. 1044. Pellagra. Editorial.

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P. 216. Hypoglycemia and the toxic effects of insulin. George A. Harrop.

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P. 292. Basal metabolism in vitamin B. Starvation. Seizaluro Okada, Euchi Sakurai, Tsukio Ibuki and Harutoslu Kabeshuna.

P. 364. Changes in the kidney in animals with increased blood pressures while on high protein diets. Franklin R. Nuzum.

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P. 569. Refusal to take food in small children. J. C. Sinclair Battley.

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P. 1033. The effect of exposure to the sun on the susceptibility of rachitic rats to infection. Elizabeth Chant Robertson.

October, 1927.

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P. 55. Six menus planned daily for Fifth Avenue Hospital "family." Sarah Hickcox.

P. 80. The dietitian and the superintendent. Elizabeth Miller.

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P. 187. Ultraviolet radiation from sunlight and incandescent lamps—its transmission through window glass and substitutes. Herman N. Bundesen, Harvey B. Lemon, I. S. Falls and E. N. Coade.

July 23, 1927.

P. 261. Rickets; a brief summary with reflections. Henry G. Gerateuberger.

July 30, 1927.

P. 337. Antirachitic activity of irradiated cholesterol, ergosterol and allied substances. Alfred F. Hess.

P. 376. Foods in diabetes. Editorial.

August 6, 1927.

P. 440. Treatment of nervous indigestion. Walter C. Alvarez.

P. 436. The treatment of heart disease other than by drugs. Paul D. White.

August 13, 1927.

P. 524. Liver extracts in anemia. Editorial.

August 27, 1927.

P. 654. Acute pancreatitis followed by diabetes. Louis M. Warfield.

P. 670. Observations in the underweight clinics in Massachusetts. Henry D. Chadwich and David Zachs.

P. 675. Vitamin requirements of nursing young. Barnett Sure.

September 3, 1927.

P. 759. A diet rich in liver in the treatment of pernicious anemia. George R. Minot and Wm. P. Murphy.

P. 768. Treatment of pernicious anemia with a high caloric diet rich in vitamines. Karl K. Koessler and Sigfried Maurer.

September 10, 1927.

P. 847. Growth of children that are below average weight. F. L. Roberts.

P. 862. Lactic acid milk mixtures. McKim Marriott.

September 17, 1927.

P. 931. The malnourished child. L. W. Sauer.

P. 967. A liver cocktail. Wm. T. Wilkins.

October 8, 1927.

P. 1215. Specificity of Minot-Murphy Diet. I. C. Brill.

P. 1222. The antirachitic activity of ultra-violet radiations. Alfred F. Hess and Wm. T. Anderson.

October 15, 1927.

P. 1326. Seasonal variation in growth of school children based on records of eight hundred and thirty-three children in Honolulu, New York and Toronto. Haven Emerson.

Journal of Biological Chemistry:

August, 1927.

P. 247. Rickets in rats. III. Metabolism of calcium and phosphorus of rats on restricted food intakes. Alfred T. Shohl and Helen B. Bennett.

P. 321. Effect of antirachitic vitamin on the phosphorus calcium and pH in the intestinal tract. Lester Yoder.

September, 1927.

P. 415. The globulins of rice. Dr. Breese Jones and Chas. E. F. Geradorff.

P. 427. Studies of glutelins. II. The glutelin of rice. D. Breese Jones, Frank A. Csonka.

P. 455. Utilization of the calcium of spinach. Laura McLaughlin.

P. 473. The fate of sugar in the animal body. VII. The carbohydrate metabolism of adrenalectomized rats and mice. Carl F. Cori and Gerty T. Cori.

P. 515. The metabolism of sulphur. XIII. The effect of elementary sulfur on the growth of the young white rat.

P. 591. The fundamental food requirements for the growth of the rat. I. Growth on a simple diet of purified nutrients. LeRoy S. Palmer and Cornelia Kennedy.

P. 631. Influence of fat and carbohydrate diets upon the level of blood uric acid. Victor John Harding, Kathleen Drew Allin and Blythe Alfred Eagles.

P. 651. The antirachitic value of irradiated cholesterol and phytosterol. VIII. The activation of sterol fractions by ultraviolet irradiation. Alfred F. Hess and R. J. Anderson.

October, 1927.

P. 1. Studies on ketosis in the rat. Harold Levine and Arthur H. Smith.

P. 61. Fat metabolism in diabetes. I. The blood lipids in experimental diabetes. W. R. Bloor, Ethelyn M. Gillette and Mildred S. James.

P. 85. Vitamin studies. XVI. Vitamin A in evaporated milks made by vacuum

and aerations methods. R. Adams Dutcher, Hannah E. Honeywell and Chester E. Dahle.

P. 123. The relation of inorganic iron to nutritional anemia. Helen S. Mitchell and Margery Vaughn.

P. 189. Studies on glutelins. III. The glutelin of oats. Frank A. Csonka.

P. 207. A quantitative study of the problem of the multiple nature of vitamin B. H. C. Sherman and J. H. Axtmayer.

P. 247. A comparison of evaporated with pasteurized milk as a source of calcium, phosphorus and nitrogen. Alice C. Willard and Katherine Blunt.

Modern Hospital:

August, 1927.

P. 81. What the Hospital owes its Dietetic Department. Lulu G. Graves.

P. 140. Vegetables have arrived. Elizabeth Emmons.

September, 1927.

P. 136. A study of starchy diluents in infant feeding, particularly in malnutrition. Lulu G. Graves, J. V. W. Griswold and I. S. Kleiner.

October, 1927.

P. 154. Avoid structural errors and increase dietary efficiency. Lulu G. Graves.

ASSOCIATION NEWS

AMERICAN HOSPITAL ASSOCIATION

The twenty-ninth annual meeting of the American Hospital Association was held at the Auditorium in Minneapolis, October 10 to 14. Dr. Morris Fishbein, Editor of the *Journal of the American Medical Association*, in his address before the annual banquet of the Association, discussed the great increase in the cost of hospital care during the last fifteen years. Hospital costs have risen 150 per cent, the cost of living 68 to 75 per cent in this period. This rise in hospital costs is probably due, according to Dr. Fishbein, to the present craze for expensive treatments and equipment. Some means should be reached whereby the man of moderate means may be able to pay his way without too severe financial strain. If communities fail to solve this dilemma we shall have a socialistic experiment with its accompanying inefficiency.

Education of nurses, Dr. Fishbein believed, has been lengthened beyond all reason. There should be two types of nurses, one trained for positions as supervisors and the other for the more simple duties.

Dr. Doane, in his address of welcome to the Hospital Dietetic Council, emphasized the need of acquainting medical students more and more with the importance of dietetics. Dr. Victor E. Levine pointed out that heart disease is one of the most vital medical problems of the civilized races.

Dr. MacEachern in his talk on the "Satisfied Guest" before the Dietetic Section of the Association stated that the majority of complaints in hospitals come from the food service. He believed that selective diet systems might obviate this to some extent. He urged that all dietary departments be organized according to the standards of the American Dietetic Association.

Margaret Gillam's paper on Hospital Cafeterias stressed the importance of avoiding institutional atmosphere in dining room furnishings. She found a 50 per cent saving on wages to employees when cafeteria service replaced waitresses.

Bertha Beecher, of the Christ Hospital, Cincinnati, in her paper on the Need for Hotel Standards for Hospital Food Service, said the inability of the dietitian to have good equipment and best paid help affected materially the standard of food. Nola Treat of the Richards-Treat Cafeteria, Minneapolis, believed that the manager must be able to cook in order to get others to cook well. She urged a standard for every dish and a recipe that will deliver that standard.

Dr. Louis H. Burlingham, Superintendent of Barnes Hospital, St. Louis, was named President-Elect of the Association.

The announcement has been made by Dr. William H. Walsh, Executive Secretary of the American Hospital Association, of his resignation as executive secretary, to take effect January 1, 1928. He has been executive secretary of the Association since February, 1925, succeeding Dr. A. R. Warner who died in 1924. Dr. Walsh is returning to his private practice of hospital consultation, with offices in New York and Chicago.

At the time of the appointment of Dr. Walsh as executive secretary in 1925, the American Hospital Association was conducting its business in two rooms in rented quarters, with a staff of six people. At the present time, the Association owns its own building, has a staff of fifteen assistants, has created a reserve fund and has just completed the most successful convention in the history of the Association.

AMERICAN DIETETIC ASSOCIATION

The tenth annual convention of the American Dietetic Association was held at the Hotel Statler, St. Louis, October 17 to 19. The meeting was opened with alumnae luncheons Monday noon. The guests at the speakers' table were Dr. Louis H. Burlingham, Superintendent of Barnes Hospital and President-Elect of the American Hospital Association, Miss E. Muriel Anscombe, Superintendent of the Jewish Hospital, Dr. B. A. Wilkes, Superintendent of the Missouri Baptist Sanitarium and Dr. Roland Kieffer, Secretary of the St. Louis Medical Association. Ruth Cooley, Chief Dietitian of the Jewish Hospital introduced the speakers, who graciously welcomed the Association to St. Louis and gave all a foretaste of St. Louis hospitality. Florence Smith responded for the Association.

By eleven o'clock Monday all previous records for early registration were broken. Perhaps one of the most pleasing features of the convention was the presence of so many new members. This interest on the part of the younger element is very gratifying.

The Program Chairman was happy in her choice of speakers and the JOURNAL Editor was fortunate in securing practically all of these papers for publication in the JOURNAL.

Monday afternoon was largely devoted to the President's Address and the reports of the Section Chairmen. Previous to this, Nola Treat of the Richards-Treat Cafeteria, Minneapolis, talked on the Most Important Thing in the Food Business. She felt that neither buying, managing nor accounting was so important as the actual preparation of food. "Too often," Miss Treat said, "we become so steeped in science that we forget about good food." There are other essentials in the production of good food; buying is one of these. It is generally true that "the best is the cheapest in the long run." Miss Treat mentioned cocoa, for example; the best grade not only went further but had an infinitely better taste. Another point in producing good food is the acquiring of good cooks. The speaker believed that the "greener" the help, if they are serious and want to learn, the better they turn out to be provided the manager knows how to train them. She regretted that good cooks were not so greatly appreciated here as they are abroad and cited the case of the famous Alfredo of Rome, who has recently been knighted, by the King of Italy, for his macaroni.

The need of defining the term "dietitian" was emphasized by Mrs. Thoma at the meeting of the Sections. The outline of the Training for Student Dietitians which has been the work of the Section for the past year may assist in this difficult definition. This course as presented offers the minimum standard. Mrs. Thoma felt that copies should be sent to schools of home economics, and to the American Hospital Association for official publication or to be issued to their members. Hospitals which offer this approved course should be listed. The hope was expressed that this outline would be a step toward the ultimate goal of registration for dietitians.

Dr. Kate Daum discussed the work of the Diet Therapy Section in collecting case records that can be used as teaching material. She believed that the teaching of normal nutrition is more vivid with a background of hospital experience. Dr. Daum thought that the Section should have a more definite organization so that every member interested could really work.

The full report of the Administration Section will be published in March.

Frances Stern felt that the Social Service Section represented a group that had no particular function, as does the Education, the Administration, or the Diet Therapy Section. It properly belongs to each of these sections. Community dietitians have the same problems of education, administration and diet therapy, only the application is different. They belong properly as a division in each of these sections.

On Tuesday morning the following papers were presented before the Administration Section, Margaret Gillam presiding: Marketing and Menu Planning, M. Faith Mc-

Auley, Assistant Professor of Institution Economics, University of Chicago; The Psychology of Personnel Management, Professor Edgar James Swift, Head of the Department of Psychology, Washington University, St. Louis; the Equipment for Institution Food Departments, Mr. Owen T. Webber of Chicago.

Mrs. Thoma presided at the Tuesday afternoon meeting of the Section on Education. Frances Stern, Director of the Food Clinic of the Boston Dispensary, discussed the Field of the Dietitian in Out-Patient Work. Dr. Lydia Roberts, Assistant Professor of Home Economics, University of Chicago, talked on Teaching Normal Nutrition. Dr. Roberts said that many home economics trained people who are out in the field as dietitians or nutrition workers, and who are dispensing either food itself or advice and information concerning it to the general public, should be called technicians rather than nutritionists. They can do a routine job in the conventional way, but their equipment is so meager that they are totally incapable of acting in a new situation. Much of the information they impart is too frequently misinformation. We still need technicians, but we also need many more of the highly trained, resourceful dietitians than we have at the present time. Dr. Roberts presented methods of teaching which should develop that resourcefulness. Dr. Wheeler talked on the Need for Standards in the Preparation of Dietitians.

Frances Stern presided at the Tuesday evening session. Dr. Martha Koehne, Director of the Department of Nutrition at the Presbyterian Hospital, New York City, spoke on the Recent Advances in Nutrition and Their Significance in the Treatment of Certain Diseases. She mentioned, among other recent pieces of work, the studies of Ellis and Isbell showing when hogs are fed on foods high in vegetable oils the fat in the animals is so soft it has little commercial value. Mendel and Anderson at Yale have confirmed these findings. Dr. Phillip Schaffer, of the School of Medicine, Washington University discussed Some Problems of Nutrition. Dr. Llewellyn Sale, Chief of Staff of the Jewish Hospital, St. Louis, read a paper on Post-Operative Treatment from the Dietetic Point of View.

Dr. Kate Daum was the presiding officer at the Wednesday morning session. Dr. F. M. Smith, Head of the Department of Theory and Practice of Medicine, University of Iowa Medical School, read a paper on the Use of Diet in Cardiac Failure. The speaker felt that the value of diet in cardiac diseases has not been fully appreciated; the heart will not improve as it should unless the general body condition is built up. Dr. William H. Olmstead, of the Staff of Barnes Hospital presented novel and helpful ways in the teaching of diabetic patients in his paper on Dietotherapy in Ambulatory Cases. Dr. Arthur E. Strauss, of the Out-Patient Department of Barnes Hospital, read a paper on the Relation of the Dietitian to the Out-Patient. Miss Townsend, of Minnesota, talked on the work of dietitians in tuberculosis hospitals. Following the papers of the evening, the members discussed informally the demand for nurses trained in diet therapy and the use of diet in nephritis.

At the business meeting of the Association the following officers were elected: Florence Smith, President; Phyllis Rowe, Vice-President; Annie L. Laird, Second Vice-President; Theresa Clow, Treasurer; Quindara Oliver, Secretary. Invitations were received from twenty-two cities for the 1928 convention, among these were Los Angeles, New York City, Richmond, San Francisco, Montreal, Cleveland, Philadelphia and El Paso, Texas.

Phyllis Rowe presided at the Wednesday evening session. Dr. Grandison D. Royston, School of Medicine, Washington University, read a paper on Pregnancy and Diet. Dr. Icie G. Macy, of the Merrill-Palmer School, Detroit, presented a paper on Breast Milk: a Variable Food. Dr. McKim Marriott, Dean of the Medical School, Washington University, discussed the Simplicity of Infant Feeding. In an analysis of difficult feeding cases it was found that anywhere from 65 to 85 per cent of the fault was in giving too little to eat. Unless the baby has *enough* calories he will not do well. Dr.

Marriott demonstrated a simple method of supplying the baby's food needs.

At the close of the meeting Miss Martin, Chairman of the Resolutions Committee read the following: The Resolutions Committee has been asked to voice the appreciation of the entire association for the excellent meeting we are just closing and to extend a vote of thanks, first to the St. Louis Dietetic Association, especially Marjorie Hulsizer Copher and Ruth Cooley for their complete coöperation; to Mr. Payne of the Hotel Statler and his assistants for their untiring efforts to please and give advice; to Messrs. Hatfield and Rein of the St. Louis Convention Bureau for their service in Registration; to Mr. McKibben of the Cotton Belt Route for the privilege of putting the Association on the air, to Mrs. Frances Vinton Ward of the St. Louis Dietetic Association for acting as the voice of the National, to Anna Boller and Exhibitors for their educational and financial services, to Mrs. Dorothy B. Richmond for her faithfulness in the new rôle of Business Manager, and lastly, for emphasis, to Margaret Sawyer who made our tenth birthday such a beautiful success.

The Association is grateful to the following list of Exhibitors at the convention, who by reason of their constructive booths and high standard of their advertising literature helped materially to make the meeting a success. Some one has said, "I believe in coöperation provided the other fellow will coöperate." It is our privilege to demonstrate to these firms our approval of their products.

The Aluminum Cooking Utensil Company, New Kensingston, Pa.
Battle Creek Food Company, Battle Creek, Mich.
Best Foods Company, Chicago, Ill.
Calumet Baking Powder, Chicago, Ill.
Coast Products Company, St. Louis, Mo.
Davis Baking Powder Company, Hoboken, N. J.
Evaporated Milk Association, Chicago, Ill.
J. B. Ford & Company, Wyandotte, Mich.
General Sea Foods Corporation, Gloucester, Mass.
Journal of Home Economics, Washington, D. C.
Hills Brothers Company, New York City
Kellogg Company, Battle Creek, Mich.
Kraft Cheese Company, Chicago, Ill.
Little Brown & Company, Boston, Mass.
Horlick's Malted Milk Company, Racine, Wis.
Merrell Soule, Syracuse, N. Y.
Pabst Corporation, Milwaukee, Wis.
A. F. Pattee, Mount Vernon, New York.
Postum Cereal Company, Battle Creek, Mich.
Ralston Purina, St. Louis, Mo.
Saunders & Company, Philadelphia, Pa.
John Sexton Company, Chicago, Ill.
Swartzbaugh Manufacturing Company, Toledo, Ohio.
Super Maid Cook-Ware, Chicago, Ill.
United States Slicing Macine, La Porte, Ind.
Walker Kitchen Utilities Company, Syracuse, N. Y.
Welch Grape Juice, Westfield, N. Y.

MASSACHUSETTS DIETETIC ASSOCIATION

The first meeting of the year was held in September at the Womens' Republican Club, Boston. About fifty members were present. The speaker of the evening was Dr. Alice Blood, of Simmons College, who reviewed some of the more recent publications on nutrition. The rest of the program, as planned for the year by Gertrude Spitz, of the Out-Patient Department, Massachusetts General Hospital, and her committee, promises to be as interesting as the first meeting.

NEW YORK ASSOCIATION OF DIETITIANS

The first meeting of the year was held at the Russell Sage Foundation, on October 10th. The speaker of the evening was Dr. Jean Broadhurst, who spoke on "Sanitation." The next meeting in November will be a dinner at Pratt Institute. Reports of the convention will be given by New York members who attended. Mrs. Huddleson will talk on her year's experiences abroad.

ONTARIO DIETETIC ASSOCIATION

The Association is planning, for this year's monthly meetings, to function more or less as a study group. The Mayo Foundation "Lectures on Nutrition" is the book that is being used as the basis of the topics studied. The membership of the Association includes hospital dietitians, commercial dietitians and members of the staff in the Household Science Department of the University of Toronto.

CONNECTICUT DIETETIC ASSOCIATION

The officers of The Connecticut Dietetic Association met at dinner in Hartford in September to formulate a tentative programme for the ensuing year. This is to be presented for approval to the Association at the November business meeting which is to be held at Grace Hospital, New Haven.

Plans for affiliation with the National Association are under way and will be discussed further, also parliamentary law. We are trying in every way to improve our meetings and all procedures.

Miss Maniza Moore, our hostess for the coming meeting, was most fortunate in being able to attend the annual meeting in St. Louis. All are looking forward to hearing a glowing report of the session. We also hope to obtain one of the leading dietitians in the East to discuss the subject "The Consultant Dietitian" at this meeting in the fall.

Miss Helen J. Hubbell, formerly instructor in Yale School of Nursing has left New Haven. Miss Louise Canham is filling her place.

Miss Williams who substituted at New Haven Hospital this summer is now assistant dietitian at Montefiore Hospital, New York City. Miss Jennie Angus formerly of Meriden Hospital is teaching Home Economics subjects in Rhode Island.

THE CHICAGO DIETETIC ASSOCIATION

The Chicago Dietetic Association has been having their usual large and well attended meetings.

In September there was a picnic meeting in Maywood, Illinois; following the picnic the members were entertained at the Edward Hiers Memorial Hospital, by members of the staff.

In October Dr. Koessler of Cook County Hospital who has done exceptional work on anemia, gave a very instructive lecture. This meeting was at the John Crerar Library, Chicago. Following Dr. Koessler's lecture members who attended the American Dietetic Association Convention gave short reports.

The Chicago Dietetic Association is issuing invitations to all dietitians, Home Economics instructors or workers from Illinois, nearby cities in Indiana, Michigan and Wisconsin, to come to Chicago in January for a two-day meeting.

The organization in Chicago is probably one of the largest in the middle west and Chicago affords unusual opportunities for a meeting of this kind. Mrs. Fischer is in charge of arrangements and will gladly receive any suggestions that any member may have.

MINNESOTA DIETETIC ASSOCIATION

Louise Marty, New Asbury Hospital, Lucile Townsend, Glen Lake Sanatorium and Harriet Warmington, Fort Snelling Hospital, Minneapolis, attended the American Dietetic Association Convention at St. Louis, Missouri.

Helen Kuntz, Northwestern Hospital, spent the summer traveling in Europe.

Gertrude Thomas, University Hospital, is again back on duty after a six months leave of absence traveling in California.

Mrs. Lyl Borak has taken Bozenia McKean's place as assistant dietitian at Glen Lake Sanatorium. Bozenia McKean is enjoying a short vacation before accepting another position.

Jeanette Ertz has resigned her position at Parkview Sanatorium. She is now dietitian at Jefferson Barracks, St. Louis, Mo.

Marion Stewart Harris, formerly head dietitian, Minneapolis General Hospital, has a baby boy.

In August, Dorothy Slocum became dietitian at the St. Paul Hospital, a newly created position in this institution.

Ione Wright, St. John's Hospital, St. Paul, became Mrs. L. G. Dahlstrom in the spring. Later she entertained the Minnesota Dietetic Association at a bridge party in her new lake-side home at White Bear.

Nora Flom has taken Ione Wright's position at St. John's Hospital.

Ellen Satre, St. Luke's Hospital, had a nine months leave of absence which she spent at her home, Rice Lake, Wisconsin.

Ethel Swanson, Mounds Park, enjoyed a four months leave of absence at Litchfield, Minnesota.

Thelma Wirtenberger, Gillette State Hospital, reports having had a wonderful trip through Itaske Park.

Eva Greyerson, Miller Hospital, enjoyed a motor trip in Northern Michigan this summer.

Florence Sperry, New Midway Hospital, took a boat trip to Montreal, stayed some time on the St. Lawrence River and motored through the National Park.

Grace Moreland, Northern Pacific Hospital, spent her vacation on the Pacific coast and in the Northern Minnesota woods.

Edna Zabitz, Northern Pacific Hospital, took a trip to California and motored through the Sahara Nevada mountains.

Mary Pascoe Huddleson and Anna E. Boller attended the Hospital Convention held in Minneapolis.

The Twin City dietitians of the American Dietetic Association had charge of an educational booth at the Hospital Convention.

The Minnesota Association of Hospital Dietitians will hold its election of officers in November.

NEWS NOTES

Dr. Herbert Swift Carter of New York, an associate in Clinical Medicine at Columbia University since 1908 and a member of the staffs of several New York Hospitals, died on October 25 at Baltimore after undergoing an operation. Dr. Carter is best known to dietitians as the author of "Diet Lists of the Presbyterian Hospital," and "Nutrition and Clinical Dietetics."

The University Hospital, Ann Arbor, Michigan, has opened a new building known as the Thomas Henry Simpson Memorial Institute for Medical Research. At the present time a study of pernicious anemia is being made. Dr. Sturgis is Director of the Institute and Mrs. Dorothy Stewart Waller is in charge of the nutrition department.

Freda Flanders has gone to the Children's Hospital, Boston, as Administrative Assistant.

Helen Horne, formerly of Cambridge City Hospital, Cambridge, Massachusetts, has accepted the position as dietitian at Beverly Hospital.

Reba Rice has been appointed to succeed Miss Sprague at Framingham Hospital, Framingham, Massachusetts.

Miss Devlin has accepted a position at the Palmer Memorial Hospital, Boston, Massachusetts.

Elizabeth Benson, formerly of Boston City Hospital, was married in September to Mr. David Hatherly.

Alice Atwood, formerly dietitian at the Jefferson Hospital, Philadelphia, Pennsylvania, is located at the Ellis Hospital, Schenectady, New York.

Grace Augustine may be reached this year at Whittier Hall, New York City.

Winifred Bell has gone to the Children's Hospital, Detroit, Michigan. Her former address was the Fifth Avenue Hospital, New York City.

Aile Beckman is now dietitian at Augustana Hospital, Chicago, Ill. She was formerly at the Rogers Park Hospital, Chicago, Ill.

Lenore Weber Bennett's present address is 11 Tetlow Street, Boston, Massachusetts. Previous to this, Mrs. Bennett was located in Iowa City, Iowa.

Neva Betz, formerly of the Akron City Hospital, Akron, Ohio, is the dietitian at the John B. Murphy Hospital, Chicago, Ill.

Ruth Bigelow's new address is 106 Morningside Drive, New York City, her old one being the Conemaugh Valley Memorial Hospital, Johnstown, Pennsylvania.

Bertha Biltz has resigned her position at the Toledo Hospital, Toledo, Ohio, to go as an assistant at St. Mary's Hospital, Rochester, Minnesota.

Esther Brower has accepted a position as assistant dietitian at the Indianapolis City Hospital, Indianapolis, Indiana. During the past summer, Miss Brower did relief work at Toledo Hospital, Toledo, Ohio.

Emilie Boock is located at St. Luke's Hospital, Richmond, Virginia. She was formerly at St. Elizabeth's Hospital in the same city.

Frances Carscadden has accepted a position at the New York State Reformatory for Women, Bedford Hills, New York.

Evelyn Colburn's new address is the Department of Home Economics at the University of Illinois. This past year she has been engaged in study at the Kansas State Agricultural College.

Mary D. Conn, formerly of the Hartford Hospital, Hartford, Connecticut, now has a position at the Grace Hospital, Toronto, Canada.

Eulalia Cray is taking a student course at the Psychiatric Institute, Morristown, New Jersey. She was formerly at the Loomis Sanitarium, Sullivan County, New York.

Martha Davis, formerly of the Scripp's Metabolic Clinic, La Jolla, California, is now at the University of Washington, Seattle, Washington. Helen Anderson, dietitian at the Methodist Hospital, Los Angeles, California, has gone to the Scripps' Clinic.

Beulah Day is at the present time dietitian at the Allegheny Valley Hospital, Tarentum, Pennsylvania. Previous to this, she was dietitian at the East Liverpool Hospital, East Liverpool, Ohio.

Mary Dunphy has accepted a position at St. Joseph's Hospital, Syracuse, New York. Miss Dunphy's previous address was Livermore, Iowa.

Genevieve Fink is now at the Oak Park Hospital, Oak Park, Illinois. She was formerly at St. Luke's Hospital, Richmond, Virginia.

Faye Fowler, who is just completing her student work at Michael Reese Hospital, Chicago, has accepted a position at Montfiore Hospital, New York City.

Cora Gray, formerly of 419 West 110th Street, New York City, is now at Catawba College, Salisbury, North Carolina.

Helen R. Gwaltney writes that she is at the Cumberland Hospital, Brooklyn, New York. Mrs. Gwaltney was dietitian at St. Mary's Hospital, Grand Rapids, Michigan.

Marjorie Frith has resigned her position at Chicago Memorial Hospital to take a position as an assistant at Michael Reese Hospital, Chicago, Illinois.

Magdalen Weber Hatfield, formerly dietitian at the Evanston Hospital, Evanston, Illinois, has returned to Chicago after a summer spent in Colorado.

Helen Hubbell is spending the year in

working for her masters' degree at Columbia University.

Erna Huenfeld, who has been in El Paso, Texas, for the past year or two, may be reached at the National Methodist Sanitorium, Colorado Springs, Colorado.

Edith Hurst writes that she is now at Veedersburg, Indiana. Previous to this, she was located at St. John's Hospital, Cleveland, Ohio.

Millie Kalsem has resigned her position at the Iowa Methodist Hospital, Des Moines, Iowa, in order to take the position of dietitian at Cook County Hospital, Chicago, Illinois.

Martha Koehne is now the head of the Department of Nutrition at Presbyterian Hospital, New York City.

Dorothy Loudon, formerly of Fargo, North Dakota, may be reached at 158 North Central Avenue, Chicago, Illinois.

Gertrude Marvel, who recently completed her student work at Michael Reese Hospital, Chicago, Illinois, has accepted a position at St. Mary's Hospital, Rochester, Minnesota.

Hazel Nelson has left the Mercy Hospital, Janesville, Wisconsin, and may be reached at her home in Argyle, Wisconsin. Katherine Gaffney, formerly, of the Clarkson Memorial Hospital, Omaha, Nebraska, has filled the vacancy left by Miss Nelson's resignation.

Estelle Nesbitt has accepted the position of dietitian at the Chicago Municipal Tuberculosis Hospital. Miss Nesbitt's former position at the Childrens' Orthopedic Hospital, Seattle, Washington, has been filled by Dorothy Goodrich, formerly of St. Mark's Hospital, Salt Lake City, Utah.

Geraldine Olmstead is spending the year in study at Teachers College, New York City. Her previous address was the Physicians and Surgeons Hospital, Wilmington, Delaware.

Arabelle Parnell's present address is 327 Orange Street, Manchester, New Hampshire. Miss Parnell was formerly at the Truesdale Hospital, Fall River, Massachusetts.

Elisabeth G. Reed has left the Buhl Hospital at Sharon, Pennsylvania, and may be reached at 333 East Lincoln Avenue, New Castle, Pennsylvania.

Helen Richardson is assistant dietitian at the Army and Navy Hospital, Hot Springs, Arkansas.

The sad news has come of the death of Mary A. Shields on September 11th. Miss Shields received her M.S. degree at Iowa City about a year ago and then accepted the position of assistant dietitian at the Cleveland City Hospital. Shortly after this she was taken ill and never fully recovered.

Emily Shirkey has left the Children's Mercy Hospital in Kansas City, Missouri, and may now be reached at the Pembroke School which is located in the same city.

Octavia Hall Smillie's present address is Andalusia, Alabama.

Helen L. Smith has been transferred from the United States Veterans' Hospital at West Haven, Connecticut, to the United States Veterans' Hospital at Castle Point, New York.

Mercedes Sullivan has accepted a position with the St. Louis Social Service. Miss Sullivan was formerly dietitian at St. Joseph's Hospital, Phoenix, Arizona.

Josephine Sutfin's present address is 256 Thurston Road, Rochester, New York. Miss Sutfin for quite a period was dietitian at the Protestant Episcopal Hospital, Philadelphia, Pennsylvania.

Amelia Stiglitz is now dietitian at the Jackson Park Hospital, Chicago, Illinois.

Pearl Treen, who was formerly dietitian at the Oak Forest Tuberculosis Sanitarium, Oak Forest, Illinois, has located at the Tri-State Sanitarium, Shreveport, Louisiana.

Louise Holdman Withers writes that she may be reached at 266 East Chicago Street, Elgin, Illinois. Previous to this, she was at the Touro Infirmary, New Orleans, Louisiana.

Grace Witmer's new address is 547 East Orange Street, Lancaster, Pennsylvania.

BALTIMORE DIETETIC ASSOCIATION

S. Maude Phillips has resigned her position at the Johns Hopkins Hospital and is locating in Baltimore as a consulting dietitian.

Florence Peters, former Home Economics instructor in the Baltimore City Schools, has been appointed instructor in Dietetics and assistant instructor in Chemistry at Johns Hopkins Hospital.

Josephine Williams, who assisted during the summer at the New Haven Hospital, New Haven, Connecticut, has taken a position at the Montefiore Hospital, New York City.

Julia Reilly has resigned her position at the Orange Memorial Hospital, Orange, New Jersey, and is spending a few months at her home in Rapid City, South Dakota.

Elizabeth Steelman has accepted the position as Dietitian at St. Mark's Hospital, Salt Lake City, Utah.

Shirley Nestle is now assistant dietitian at the Seaside Hospital, Long Beach, California.

Irene Olsen is located at Madison, Wisconsin, as dietitian in the University Commons.

WASHINGTON BRANCH

The Washington Branch is made up chiefly of Seattle people, with a few from Tacoma. We meet every two months for dinner, which is followed by a lecture, reports, round table discussion and a business meeting. At our meeting a week ago, Mable Flanley of Seattle General Hospital, was elected President and Flora McLaughlin, Tacoma General Hospital, Treasurer. Attendance at meetings is generally about twenty.

APPETIZERS

The Tenth Birthday Dinner which took the place of the annual banquet of the American Dietetic Association was a great success due to the clever planning of Mary DeGarmo Bryan, Margaret Sawyer and others. Mrs. Huddleson introduced the several "stunts" in celebration of the event, read many congratulatory telegrams and cables that had been received from A. D. A.'s good friends and admirers and offered this coat of arms for A. D. A.: A sprig of spinach rampant on a yellow field suggestive of orange juice and egg yolks, surmounted by four glasses of Grade A milk, with a border of oatmeal mush and the motto underneath in Latin, "I feed."

Mrs. Copher read a case report of the remarkable development of our infant prodigy that presented many new and startling bits of scientific information. During the evening Station DIET of Boston broadcasted news despatches especially pleasing to the assembled audience.

At the close of the dinner Margaret Sawyer cremated the imps which have tormented Ada for the past decade:

The Consignment to the Flames

Woman who is trained a dietitian is born to trouble as the food goes downward. She rises up with her spinach and bran only to be smacked firmly and put in her place. Truly she was born into a profession of sorrow where sick and drunken cooks and scullery maids beset her trail. Even the patients whom she in sickness and in health serves early and late cast disdainful glances and make cutting comments on the handiwork of her creation. Consigned in the very beginning to the abysmal depths mid steam and lazy Sadies, smell and roaring Hades, she gropes her gloomy way.

But the years glide onward. Praise comes to the dietetian and kind words and a place in the sun. And she can aspire in her new position to a private crematorium.

There shall be found old pests and new; the failures that have haunted her past and the unsatisfactory conditions in the diet kitchen which bedevil her present. One by one they shall enter the furnace—the flames shall consume them—they shall be no more.

To the consuming fire we consign thee—BRAN. Ten thousand dietitians have wept over thee in vain, but not all their tears have washed thee starch-free, nor has their burning wrath dried thee. Come ELECTRIC MIXER to the fire, who revolves busily when there is no need and stands useless with bran half washed.

What is this I hold in my hand—the INTERNE, cheerful, puffed out with his own conceit, sneaking into the diet kitchen after hours for a special handout—INTO THE FIRE!

To the heart of the flames 100 CALORIE PORTIONS and you, too, PICKLES, LOLLIPOPS, HOKEY POKEY and the PERSPIRING PUP.

Burn all faulty equipment—all stoves that grow lukewarm and weary at meal time, all ice boxes that won't ice, all budgets that will not budge—all patients that will not eat, all students that will not learn, all waitresses that will not wait, all cooks that cannot cook. See them rise in dreadful flames.

Here is the SURGEON who wants a carbohydrate-free diet prepared with plenty of rice.

Behold the jaunty, sparkling SALESMAN, full of quips and quirks and wanton wiles, nods and becks and wreathed smiles, selling us gelatin as clear as mud, flour, cocoa, postum, vegetables, apricots, sugar, tables, linoleum. What a conflagration!

They burn—they burn—they are consumed. But out of the ashes of our woes—

out of the flames that reduce our troubles—what do I see! What is this that arises, beating its crimson wings in the air, flaunting its golden tail feathers? A phoenix arising from the flames—undestroyed by fire—the Perfect Dietetian—indestructible, made of asbestos, guaranteed to outlast all others. The Perfect Dietitian—there she stands! Teacher, administrator—cook! All things to all men. Head nurses cannot wither her nor purchasing agents stale her infinite resource and sagacity. Behold she flutters to the stars! May she go on forever!

REPORT OF THE DIETOTHERAPY SECTION, 1926–1927

The following members of the American Dietetic Association were asked to serve on the Dietotherapy Committee:

Dr. Ruth Wheeler, Poughkeepsie, New York.
Mame T. Porter, Toronto General Hospital, Toronto, Canada.
Fairfax Proudfit, 1781 Peabody Avenue, Memphis, Tenn.
Nelda Ross, University of Iowa Hospital, Iowa City, Iowa.
Thelam Tubbs, Peter Bent Brigham Hospital, Boston, Mass.
Mary M. Buckles, Kansas City General Hospital, Kansas City, Mo.
Ruth M. Cooley, Jewish Hospital, St. Louis, Mo.
Mary Harrington, University of Michigan, Ann Arbor, Mich.
Mary W. Northrop, Montefiore Hospital, New York City.
Elizabeth Wychoff, Presbyterian Hospital, New York City.

The work of the Committee was outlined as follows:

1. Collect data on the enclosed form on the effect of use of diet in pernicious anemia and in nephritis.

2. Start a collection of case records in cases where diet has been the important therapeutic agent. This material would be valuable for those who have to teach especially in colleges not having a close contact with hospitals. The material would be held in the central office and sent only to responsible persons.

3. Collect data on the protein intake of children. For the first year it is probable that the bulk of the material would be estimated intakes, though weighed diets and nitrogen balance experiments should be included as often as possible.

4. Collect historical material on the use of food as a therapeutic agent and also any material as to the establishment of special diet kitchens etc. A bibliography is probably the starting point here.

5. The training of the nurse in special diets so that she can meet the demand for diabetic nursing or fill the need for general and special diet work in the small hospital. We should have to find out if possible the demand for this type of nursing and would want to discuss the advisability of a short course of training of a post graduate character. Are there sufficient nurses in training who have a home economics background, who might be interested?

Approximately 150 letters were sent out. These consisted of:

1. Correspondence with committee members.
2. Letters in answer to queries about the use of diet in various conditions.
3. Letters concerning the section program.

The section chairman with the aid of members in Iowa City worked up two programs for local association meetings. These were published in the JOURNAL, March, 1927.

The Committee Chairman reports the following accomplishments:

A brief report on: The Demand for Nurses Trained in Special Diet Work. Mary Harrington.

Bibliography of historical material. Compiled by Nelda Ross and Kate Daum.

Case records (ready to be duplicated):

5 Pernicious Anemia
1 Gout
3 Cardiac
3 Obesity

Data on use of diet in Nephritis and Anemia:

Mary Buckles, Kansas City General Hospital, Kansas City, Mo.
Thelma Tubbs, Peter Bent Brigham Hospital, Boston, Mass.
Mary Northrop, Montefiore Hospital, New York City.
Fairfax Proudfit, Memphis, Tenn.
Nelda Ross, Iowa City, Iowa.
Florence Dunkle, Iowa City, Iowa.
Kate Daum, Iowa City, Iowa.

KATE DAUM,
Chairman.

REPORT OF THE ADMINISTRATION SECTION, 1926–1927

The following members of the Association were selected to serve on the Administration Section Committee for 1926–1927. The selection was made keeping in mind the particular interest of each in administrative problems and also the geographical distribution.

Miss Mary Lacy, Akron City Hospital, Akron, Ohio.
Miss Mary E. Reed, University of Chicago Hospital, Chicago.
Miss Gertrude Thomas, University Hospital, Minneapolis.
Miss Rosina Vance, Massachusetts General Hospital, Boston.
Miss Ruth M. Cooley, Jewish Hospital, St. Louis, Mo.
Miss Ruth M. Cornman, United States Veterans Hospital, Outwood, Ky.
Miss Anne Boller, John Sexton Company, Chicago.
Miss Martha Koehne, Presbyterian Hospital, New York City.

Letters giving a résumé of the work on administration carried on by the section during the last four years were sent to each member of the Committee for consideration and to obtain an estimate of the plan of work for the future. The work since 1923 has progressed as follows: In 1923 an excellent survey was made of the status of the dietitian's work. In 1924 a survey was made of the organization and maintenance of the hospital dietary department. In 1925, the Committee reported on the department budget and last year (1926) the Committee contributed a food budget form and gave a report of its use.

With these past accomplishments before the Committee, suggestions were asked for the present year's work. Special reference was made to the work of the Committee last year of which Miss George was chairman, which continued the work on the food budget. Members of the Association interested in this food distribution ledger sheet were heartily in favor of having the work continued along the same line another year. This would seem logical as reports and studies in the past have not been made use of to a sufficient degree. Other suggestions which were presented to the Committee for consideration were many. It was suggested that there is an opportunity of service to the hospital in a study of food buying, stating that salesmen who sell to institutions feel that dietitians

do not know how to buy, nor do they know how to instruct the purchasing agent what to buy. The personnel budget was the most popular subject suggested, as a problem of vital interest to dietitians especially in view of the number of new hospitals and rebuilding that is being done in order that the hospital administration can be presented with statistics to prove the need of added personnel to conform with the expansion program.

It has been suggested that a comprehensive survey be made of different classes of hospitals, perhaps sub-dividing these into localities and studying the allowance that is being made for personnel in the budget; this might bring up the question of how much loss the average dietary department is sustaining through too few employees, underpaid employees etc. These statistics might prove to the administration, the personnel required. Institutions, it is stated, are sometimes allowed a very generous food per capita but curtailed in respect to personnel.

As one of our members is associated with government hospitals, very excellent information, we felt, could be secured regarding the personnel budget of the three distinct types of United States hospitals. It may be necessary to continue this study another year.

Another member of the Committee felt we might compile some information for the use of the younger dietitian on types of equipment and materials which have proved satisfactory.

The majority of the Committee seemed to feel the need of a study of the personnel of the hospital dietary department and this prompted us to join with the American Hospital Association in their proposed study on "The Hospital Dietary Department." The plan seemed an opportunity and it was accepted as the year's work. Dr. Benjamin Andrews of Teachers College, Mrs. Mary deGarmo Bryan and others interested in the field of dietetics assisted in the formulation of the questionnaire. The Administration Section is grateful to the American Hospital Association and their associates for preparing such an excellent questionnaire and for its distribution to hospitals throughout its association.

Summer school students at Teachers College, interested in the administration of the hospital dietary department, tabulated 142 of the questionnaires. Thirty-three additional ones were sent to the Committee, September 1st, making a total of 175 hospitals reporting, from which information was compiled. At this point it would have been of decided advantage to confer with members of the Committee for final assembling of the material. As this was impossible, the Chairman assumed the re-

sponsibility of making the final analysis. Five hundred mimeographed copies of this analysis were prepared for distribution among the members of the association at the Convention.

The Committee work coming as it did in August and September when vacations were a consideration, it was not possible to give over the work to individual members. This is to be regretted, but they were kept informed of the progress of the work. The interest and assistance from the Committee would not only have unified the work, but individuals would have been benefited by assuming more of the responsibility of the work.

As another year approaches and one looks back on the contributions of the Committee during the past five years, one is struck by the unity of aim and purpose, which has been to arrive at some standardization of the hospital dietary department. Another year should not this ultimate goal take form in a constructive way and the Committee begin to formulate standards? Each member of the Committee might work for standardization in each locality using this material which has been made available in the last five years, as a basis for the work. Certain members could be responsible for specific sized hospitals. This would give the younger dietitian a standard to work from. The dietitian with the problem of a new building or a reconstructed and enlarged hospital would have statistics to present to the hospital administration and aid in obtaining a personnel budget adequate and in keeping with the general plan of expansion.

The Hospital Standardization movement is receiving the support of allied organizations and the American Dietetic Association should show its interest and coöperation in this progressive development by contributing standards which will result in the better care of the patient by the dietary department and more efficient administration.

Respectfully submitted,

S. MARGARET GILLAM, *Chairman.*

REPORT OF THE PUBLICITY CHAIRMAN

I. Local Committee
   1. Made up of representative members of profession in St. Louis. Work mapped out with them in May.

II. State Chairmen.
   1. Appointed from list of former State Chairmen and other members. The final response numbered thirty.

III. Sent out three bulletins before convention to members of American Dietetic Association.
   1. Emphasized: Railroad certificate plan, directions for trains, taxi service, buses, etc; local trips; program; St. Louis hospitals; advantages of St. Louis; hotel rates; exhibits.

IV. Journal, magazine and newspaper publicity.
   1. Sent article for each issue of the Journal of the American Dietetic Association.
   2. Sent article to a group of 22 magazines telling of field of nutrition in order to draw all dietitians; promised program which was sent later.
   3. Sent announcement to local Medical Journal and Hospital Publication.
   4. Interviewed all City Editors asking for convention publicity Sunday before, and during week of convention. Gave out programs. Prepared article for each newspaper every day and gave preliminary one. Asked reporters to come to convention, meet speakers, etc. Asked speakers for abstract of articles before convention and pictures of speakers for the press. Had special room for reporters and publicity work.

V. Enlisted help of Convention Bureau of St. Louis on Registration, Publicity, etc. Hotel Statler gave material such as Statler blotter, room rates, etc., to send with other publicity to members. St. Louis pictures contributed by Convention Bureau.

VI. Arranged for announcement of convention at all medical conventions, nursing conventions in St. Louis and elsewhere. Ordered signs for convention, such as Publicity, General Information, etc. Worked with local Hospitality Committee.

VII. Sent invitations with program, to all local allied organizations and others interested, the week preceding convention, also final program to all local speakers.

VIII. Sent letter to Hospital Superintendents urging them to send their dietitians to the convention.

IX. Radio publicity.

1. Procured announcement over KMOX week before convention.
2. Program publicity over KMOX during convention week.

X. During convention published Convention Daily, making announcements, thanking patrons, helpers, members, hotel management. Gave out news letters and reminders.

XI. A report was given at the Business Meeting of the Association. A file of articles which appeared in newspapers and magazines and an outline of work done together with new ideas and suggestions is to be sent to the Chicago office to serve as a precedent book for the next Publicity Chairman.

XII. Post Convention publicity.

1. An article is to be sent to journals and magazines giving a suitable report of convention to each publication.

There has been no precedent book established for publicity work; may I suggest that one is needed for the assistance of our future publicity chairmen?

May I also suggest the need of:

(1) A budget for publicity work.
(2) Securing State Chairmen as early in the year as possible, either in January or February.
(3) A competent stenographer for one day a week.
(4) A simple, workable filing system.
(5) Early letters to convention speakers asking for abstracts of their papers and photographs for publicity, thus enabling chairman to meet demands of reporters for concrete material.

Respectfully submitted,

MARJORIE HULSIZER COPHER.

ADDRESSES FROM WHICH MAIL HAS BEEN RETURNED

Alice L. Adams.....1017 Eighth Ave., Oakland, Calif.
Helen C. Barcalow.....Suburban Hospital, Bellevue, Pa.
Emma Childs.....2301 Maryland Ave., Baltimore, Md.
Gladys Norton Eckley.....Jackson Park Hospital, Chicago, Ill.
Ruth E. Forsberg.....Minor Hospital, Seattle, Wash.
Hazel Winders Galloway.....Childrens' Hospital, Hollywood, Calif.
John Lawler.....210 E. 23rd St., New York City
Bess Pontz.....Taylor Hospital, Ridley Park, Pa.
Lorena Rose.....Watts Hospital, West Durham, N. C.

NEW MEMBERS

(August, September and October)

†Abbey, Claire.....Vermont State Hospital, Waterbury, Vt.
*Arthur, Miriam.....939 Altgeld St., Chicago, Ill.
*Bales, Eva.....Wesley Hospital, Wichita, Kans.
Beatty, Mary A.....St. John's Hospital, Lowell, Mass.
*Beckwith, Mildred M.....605 W. Tremont St., Hillsboro, Ill.
Blazek, Mary R.....St. Joseph's Hospital, Far Rockaway, N. Y
*Bowen, Buneta.....Sheldon, Ill.
†Cattanach, Alice M.....804 Howard Ave., New Haven, Conn.
*Darrow, Mary I.....401 N. Cherry St., O'Fallon, Ill.
Du Puis, Meredith.....Deaconess Hospital, Cincinnati, Ohio
*Eddins, Pinkeye.....1028 Fifth Ave., Forth Worth, Texas
†Ellis, Mary.....Watts Hospital, West Durham, N. C.
Fitzhugh, Margaret.....Johns Hopkins Hospital, Baltimore, Md.
*Flagg, Katherine.....Moro, Ill.
*Fowler, S. Faye.....Michael Reese Hospital, Chicago, Ill.
Green, Mary L.....Wm. Newton Memorial Hospital, Winfield, Kans.
Groom, Eleanor M.....7401 Woodrow Wilson Ave., Detroit, Mich.
*Hammann, Florence.....1057 Fifth St., Milwaukee, Wisc.
†Harman, Mary A.....Butterworth Hospital, Grand Rapids, Mich.
*Harney, Anne R.....Bradford, Ill.
Helburn, Betsy D.....Lebanon Hospital, New York City
Henderson, Olive S.....1421 Annex, Battle Creek, Mich.
*Heywood, Helen R.....Boston City Hospital, Boston, Mass.
Hicks, Katherine.....Robert Koch Hospital, Koch, Mo.
Hinkle, Mary Belle.....Kansas City Tuberculosis Sanatorium, Leeds, Mo.
Hughes, Jessie.....Middletown, Calif.
Hyman, Pauline.....1316 State St., Lima, Ohio
Iles, Clarice.....Broadlawns Hospital, Des Moines, Iowa
Jamison, Lida A.....1753 W. Congress St., Chicago, Ill.

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* Junior Members.
† Associate Members.

*Johnson, Margaret L.	Mercy Hospital, Bakersfield, Calif.
Kappus, Julia A.	St. Joseph's Infirmary, Fort Worth, Texas
†Kuebler, Elfriede	Sinai Hospital, Baltimore, Md.
Langdale, Edith	Fitzsimmons Hospital, Denver, Colo.
Laws, Camilla	4100 Fillmore St., Chicago, Ill.
Linder, Grace	Baltimore City Hospitals, Baltimore, Md.
†Manning, Dorothy	Meriden Hospital, Meriden, Conn.
†Martin, Madeleine E.	St. Vincent's Hospital, Bridgeport, Conn.
*Marvel, Mary G.	St. Mary's Hospital, Rochester, Minn.
†Moore, Lillian B.	Women and Childrens' Hospital, Chicago, Ill.
McCarney, Kathryn	Iowa Lutheran Hospital, Des Moines, Iowa
†McDonald, Dorothy	White Memorial Hospital, Los Angeles, Calif.
O'Brien, Dorothy	Mercy Hospital, Scranton, Pa.
Padget, Anne F.	Cortland County Hospital, Cortland, N. Y.
Peters, Florence	Johns Hopkins Hospital, Baltimore, Md.
Queaneau, Marguerite	Hackensack Hospital, Hackensack, N. J.
*Reeves, Mary	1753 W. Congress St., Chicago, Ill.
Revore, Madeleine L.	Henry Ford Hospital, Detroit, Mich.
†Riale, Gertrude	Home for Incurables, Baltimore, Md.
Roll, Helen G.	Oklahoma Baptist Hospital, Muskogee, Okla.
*Sargent, Mildred O.	Augustana Hospital, Chicago, Ill.
*Shirkey, Emily F.	Pembroke School, Kansas City, Mo.
Simpson, Dorothy	Board of Health, Detroit, Mich.
Smith, Gladys	George Peabody College for Teachers, Nashville, Tenn.
Smull, Mary L.	2826 S. Hope St., Los Angeles, Calif.
Stanley, Isabel	Morton Hospital, Taunton, Mass.
*Steelman, Elizabeth	St. Mark's Hospital, Salt Lake City, Utah
*Stahl, Alice M.	178 Eighteenth St., Milwaukee, Wisc.
Stewart, Alice M.	Michael Reese Hospital, Chicago, Ill.
*Stone, Berenice	Passavant Hospital, Jacksonville, Ill.
*Streator, Lucile	Worrell Hospital, Rochester, Minn.
Stuart, Martha H.	300 Longwood, Boston, Mass.
Tilds, Marion	Aurora Hospital, Aurora, Ill.
Trebaol, Yvonne M.	O'Connor Sanitarium, San Jose, Calif.
*Verne, Charlotte E.	2301 Bellevue Ave., Los Angeles, Calif.
Ward, Edna V.	United States Veterans' Hospital No. 60, Oteen, N. C.
Whittington, Eva	Hedrick, Iowa
*Williams, Josephine	804 Howard Ave., New Haven, Conn.
†Williams, Mabel E.	Big Sister Hospital, Ventura, Calif.
Wolfe, M. Francis	824 Fidelity Building, Baltimore, Md.

REPRINTS AVAILABLE

These reprints are available at the Business Office of The American Dietetic Association, Room 1122, 25 E. Washington Street, Chicago, Ill.

Arthritis, Carbohydrate Studies in. Martha V. Nelson and Julian S. Boyd.	$.15
Biliary Tract, Some Effects of Diet on the. Glover H. Copher	.10
Budgeting the Dietary Department and Purchasing Food Supplies. Lucius R. Wilson.	.10
Buying and Meal Planning, Scientific. Quindara Oliver	.27
Calves' Liver, Preparation of, for Pernicious Anemia Diets. Thelma Tubbs and Elizabeth Bellinger	.07
Civil Service and The Dietitian. Benjamin R. Andrews and Alice B. Leet	.12

College Courses, Report on, for Prospective Dietitians. Abby L. Marlatt..... .10
College Education and the Food Specialist. Agnes Fay Morgan..... .10
College Graduate, Adjustment of, to Hospital fork in Nutrition. Amalia Lautz..... .10
Department Budget, Administration Section Report..... .10
Diabetes, A Report of a Case with Complications. Fairfax T. Proudfit..... .15
Diabetes Mellitus, Food Requirements in Children with. W. S. Ladd..... .17
Diabetic Diets for Children. Julian D. Boyd and Martha V. Nelson..... .10
Dietaries, A Comparative Study of Italian, Polish and Negro. Gertrude Gates Mudge.. .15
Dietary Department Budget and Equipment. Mary E. Reed..... .12
Dietetic Department, the Place of the, in The Hospital from the Administrator's Viewpoint. E. S. Gilmore..... .10
Dietetics, A Chapter in the History of. Martha A. Byerly..... .07
Dietitians, Student, An Accredited Course for. Eva Thallman..... .15
Dietitians, Student, A Checking Scheme for Recording Special Abilities and Qualifications. Amalia Lautz..... .05
Diets Low in Water and Mineral Content, The Therapeutic Use of. Norman M. Keith, M.D., Florence H. Smith, B.S., and Mary Whelan, M.A..... .20
Emotions and Digestive Functions. George W. Henry, M.D..... .12
Food Selection, Teaching, to Patients. Florence H. Smith, B.S..... .15
Food Distribution Ledger Sheet. E. A. George..... .08
Food Fads. Mary Pascoe Huddleson..... .15
Food Habits, Intelligence and Character in Relation to. Haven Emerson..... .07
German Diet, Changes in the. R. R. Kuczynski..... .07
Gout, The Effect of Vegetable Purines on the Blood in. Ruth Wheeler and Bessie I. Wallace..... .10
Health Clinic, Nutrition in a. Bertha Edwards..... .12
Hospital Dietary Department, A Forecast. Malcolm T. MacEachern..... .10
Hospital Dietitian, A View of the, from the Nursing Standpoint. Elizabeth A. Greener. .07
Hospital Food Bills, Economic Analysis of. Ruth Wheeler and Vivian Moe..... .10
Hospital Food Bills, A Nutritive Analysis. Ruth Wheeler and Edna Shalla..... .15
Hospital Kitchen, Equipment for a. Ruth M. Cooley..... .08
Hotel Food Department, The Operation of a. Arnold Shircliffe..... .12
Job Analysis, Residence Hall. Elizabeth Bemis, Lenna Cooper and Mary Walton.... .10
Karell Diet and a Modified Karell Diet. Edward G. Bannick, M.D., and Florence H. Smith, B.S..... .12
Liver, Preparation of, for Patients with Pernicious Anemia. Hazel Bradburn..... .10
Nephritis and Hypertension, The Relation of the Diet to. Norman M. Keith, M.D., and Florence H. Smith, B.S..... .15
Normal People, Certain Tendencies of Modern Hospital Dietaries for. Reginald Fitz and Amalia Lautz..... .10
Nutrition Worker in the Hospital. Helen Hubbell..... .15
Peanut, the Chemistry of; A Clinical Study. Florence H. Smith and Russell M. Wilder. .15
Peanut Meal, The Composition of and Its Use as a Diabetic Food. Margaret Mumford Neal..... .15
Pernicious Anemia, Adjusting the Diet to the Patient with. Thelma Tubbs, B.S., and Elizabeth Bellinger, B.S..... .12
President's Address. Ruth Wheeler..... .10
Student Dietitians in Hospitals, Standardization of Courses for. Section on Education. .10
Student Nurses, Bedside Teaching of. Helen J. Hubbel..... .15
Student Nurses, The Examination of, in Dietetics. Sister M. Domitilla, B.S., R.N..... .12
Ulcer of the Stomach and Duodenum, Medical Treatment of. Milton M. Portis..... .10
Vitamin Structure, Recent Developments in. Walter G. Eddy..... .10